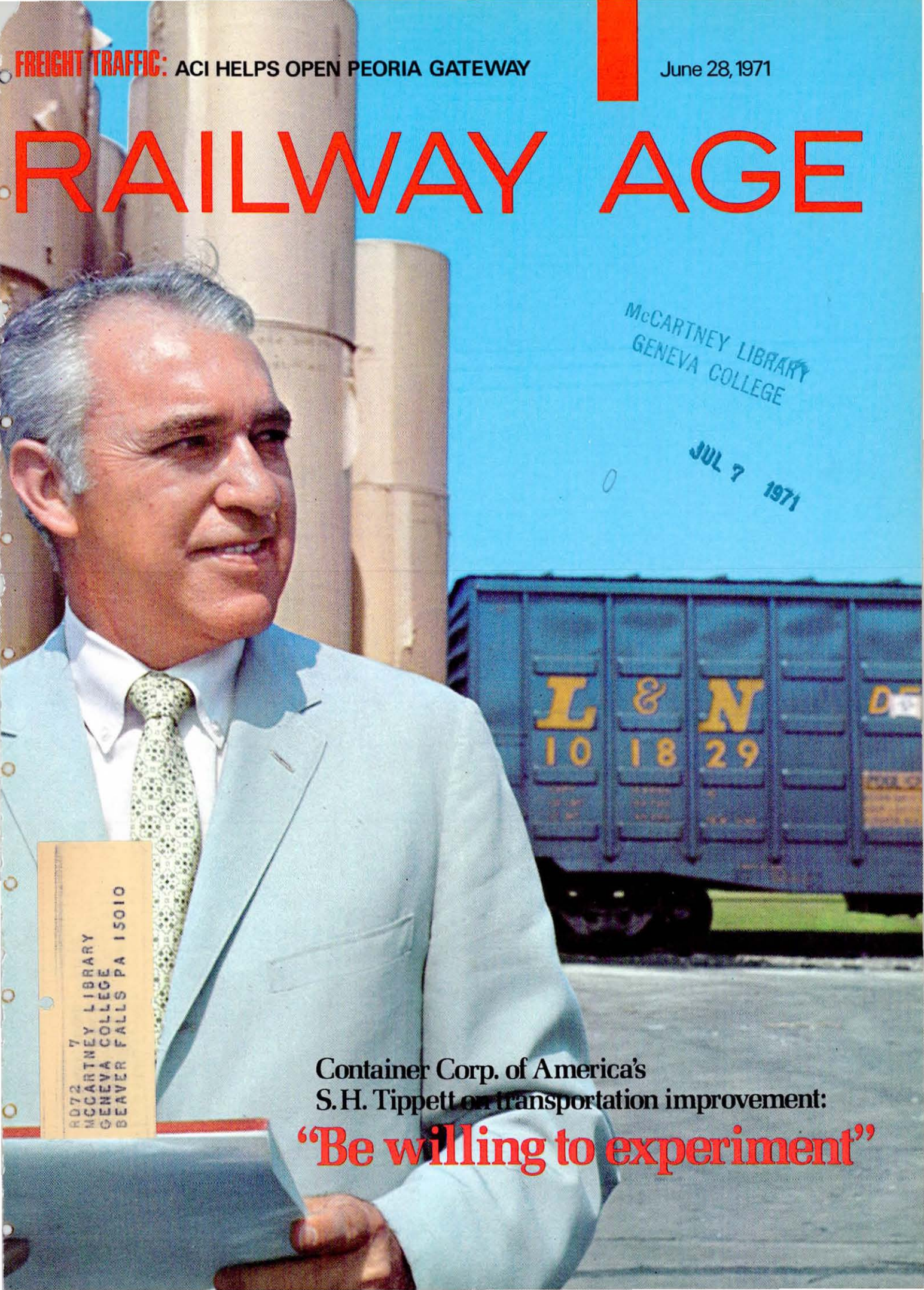
FREIGHT TRAFFIC: ACI HELPS OPEN PEORIA GATEWAY

June 28, 1971

RAILWAY AGE



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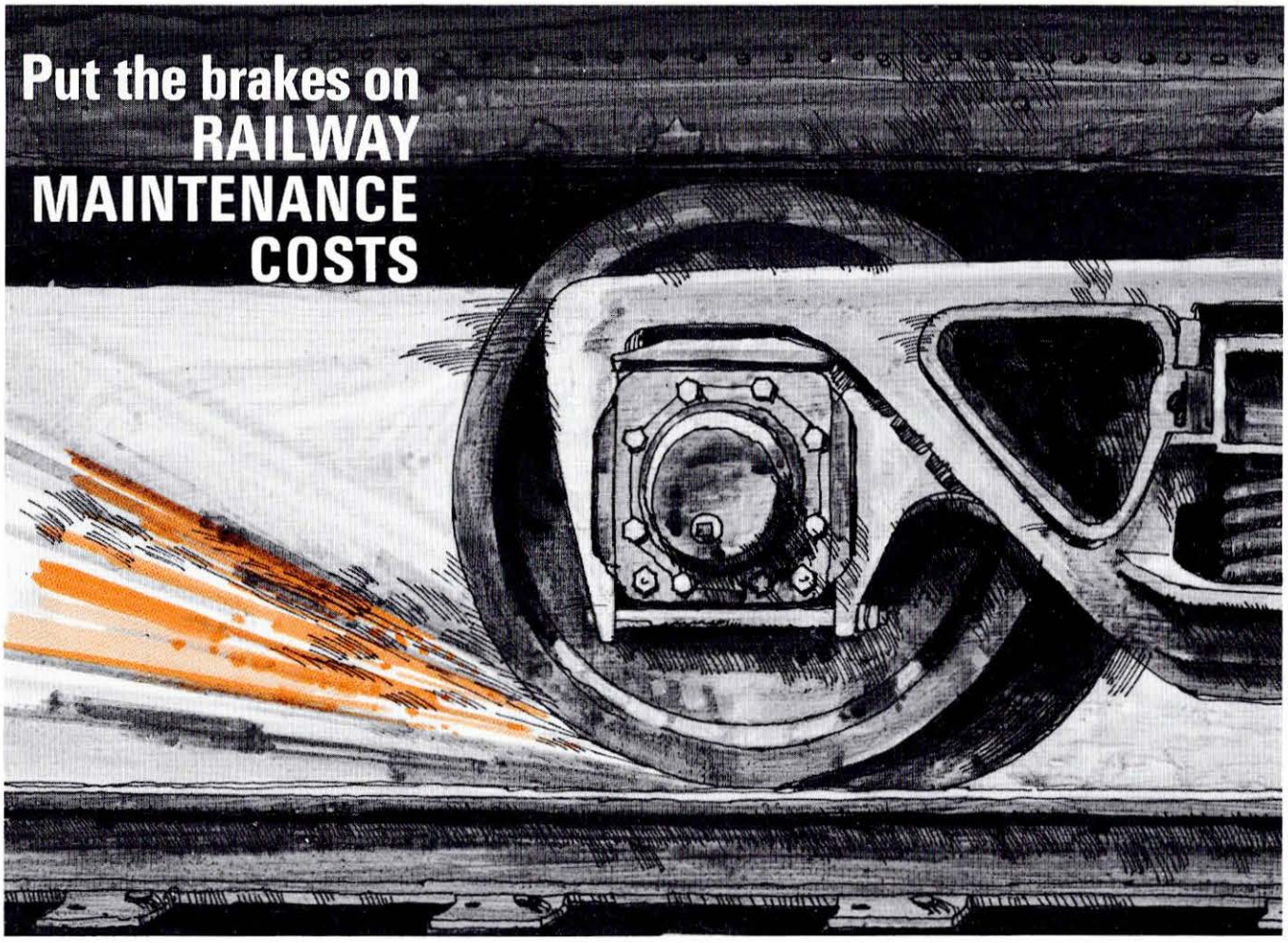
Container Corp. of America's
S. H. Tippett on transportation improvement:

"Be willing to experiment"



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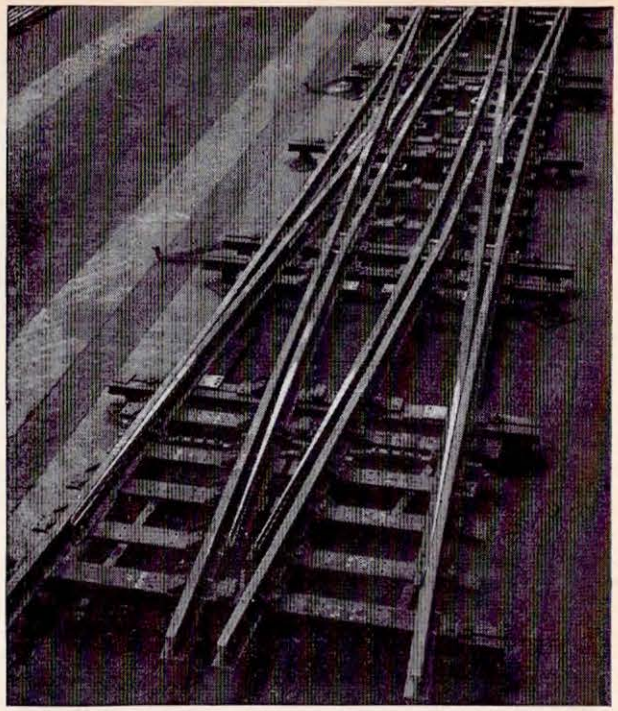

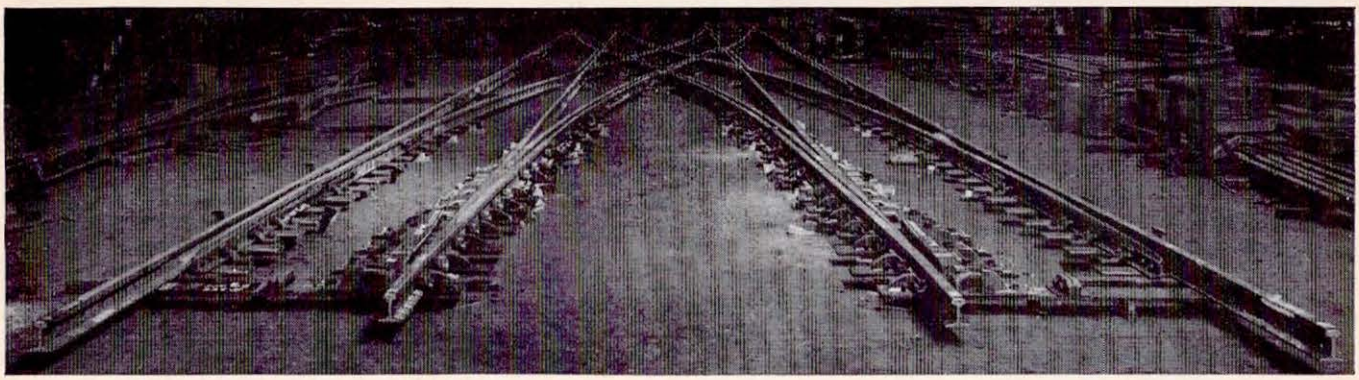

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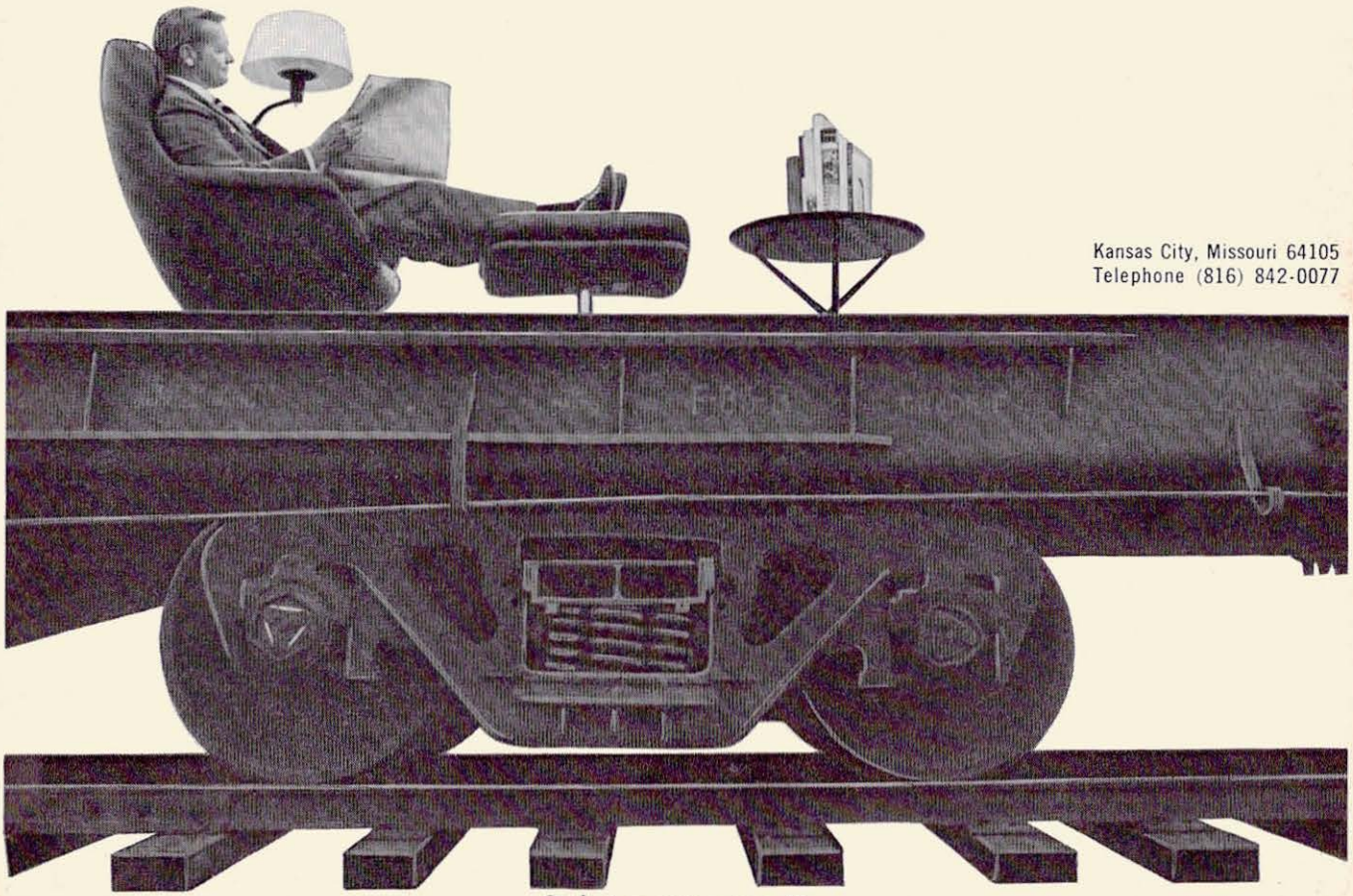

Kansas City, Missouri 64105
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Circle 4 on coupon page 35

RAILWAY AGE

June 28, 1971 • Vol. 170 No. 12

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Railway Age, established in 1856, is indexed by the Business Periodicals Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.
Published semi-monthly by the Simmons-Boardman Publishing Corporation, 508 Birch St., Bristol, Conn. 06010.
Railroad employees' subscription rate, U.S. possessions, Canada and Mexico, $6 one year, $9 two years, all others $15 for one year, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year; in the eastern hemisphere, $15 a year. Single copies 60¢, except special issues.
Address all subscriptions, change of address and correspondence concerning them to Subscription Dept., Railway Age, P.O. Box 530, Bristol, Conn. 06010.
Change of address should reach us three weeks in advance of next issue date. Send old address with new enclosing, if possible, your address label. Post Office will not forward copies unless you provide extra postage.

Member of

Circulation Dept.: John Rogers Director of Circulation, 350 Broadway, New York, N.Y. 10013. POSTMASTER—SEND FORM 3579 TO P.O. BOX 530, BRISTOL, CONN. 06010.

Printed at the Hughes Printing Co., 34 North Crystal St., East Stroudsburg, Pa. 18301. Second-class postage paid at Bristol, Conn., and at additional mailing offices.

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Inside

LUTHER MILLER

WORDS-TO-RAILROAD-BY

The truckers say, "If you've got it, a truck brought it." Actually, if a trucker brought it, it probably started out on the rails—in the form of the materials, raw or refined, that go into the products that go into the trucks. But the truckers' slogan is punchy, if not precise, and Senior Editor Gus Welty suggests that railroads could use some similarly memorable words-to-live-by. For example:

"When you're out of railroad, you're out of transportation."

Or "When you say 'railroad,' you've said it all."

Gus didn't say so, but we suspect that he began thinking along these lines after his recent talks with the traffic people at Container Corp. of America—talks which led to this week's "ship-by-rail" cover story.

Clearly, if CCA were out of railroad, CCA would be out of transportation—and very likely out of business. CCA, whose total freight bill adds up to $40 million a year, sends and receives some 100,000 carloads of freight annually. More than 90% of its raw materials come in by rail.

CCA is not uncritical of railroad performance. But it obviously has found more pluses than minuses in a relationship that has been mutually profitable for many years.

Director of Traffic S.H. Tippett told Railway Age: "When I express criticism, I don't want to seem as if I'm leading a cavalry charge against the railroads. Railroads have been good to my industry. They truly have been the low-cost carrier. And we have progressed together."

An account of what this togetherness has meant to both customer and carrier begins on p. 23.

PEORIA & PEKIN UNION PUTS ACI TO THE TEST

The benefits of ACI are just around the corner, proclaim its advocates. And always will be, grumble its detractors.

Certainly, ACI's potential has not been translated into reality as quickly as we had hoped. Railroads have to date dawdled through five ACI car-labeling deadlines; the installation of scanners is far behind the labeling process.

But those familiar with the history of technological innovation know that big successes are almost invariably preceded by small ones—and a small, though locally important ACI success appears to be in the making at East Peoria, Ill. There, the Peoria & Pekin Union has installed ACI scanners at nine points in its "A" and "B" yards. The hoped-for benefits are described by Bob McKnight, RA's system controls editor, in the article beginning on p. 26.

In a recent editorial (May 10, p. 58) we commented that "the time surely has arrived to give ACI a fair shake." What happens at Peoria will help determine if the benefits of ACI have been, in fact, worth waiting for. We will all watch P&PU's experiment with interest—and hope.

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Our railroad school is just one of the ways that the American Telephone and Telegraph Company and your local Bell Company help fulfill the communications needs of your business and industry.

Because to talk to you, we must first speak your language.

RAILWAY AGE

June 28, 1971

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The color photograph of Container Corp. of America's S. H. Tippett was taken by Chicago photographer Steve Dutsch at CCA's Carol Stream, Ill., container plant.

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Short and Significant

WASHINGTON

NATIONALIZATION THREAT "REAL," SAYS BUSH

ICC Commissioner John W. Bush fears that transportation people may be too complacent about the "intolerable specter" of nationalization. Warning that if some railroads are nationalized, "the other modes would soon be swept in, too," Bush told a meeting of truckers at Hot Springs, Va.: "Within the Department of Transportation and the Commission, key staff people are presently trying to come up with a figure of what it would cost to nationalize the Penn Central—if it should become a choice of doing that or having to stop the road's carrier operations." He called on motor carrier, railroad and waterway companies to work against this eventuality by finding "areas of agreement as to where statutory changes can be considered in this session of Congress." (Viewpoint, p. 48).

WATER CARRIERS WANT EQUAL TIME

The Water Transport Association, reacting to news that President Nixon met on June 10 with railroad industry leaders, has asked the President for an "equal opportunity" to present its own views. WTA's John Creedy commented at the end of a two-page letter to Nixon that his association wants minimum rate power retained "where it is necessary to prevent the more efficient carrier from being precluded from competing by readily recognizable power tactics having nothing to do with relative efficiency."

FINANCIAL

PC's "BILLION-DOLLAR BIDS" DUE OCT. 1

Penn Central trustees have set Oct. 15, 1971, as the deadline for receiving bids on more than $1 billion worth of Manhattan property which the bankrupt company is putting on the block. Winners (and losers) in the bidding will be notified by Nov. 30. The so-called "Park Avenue properties" cover approximately 10 blocks within a 29-acre area in New York City's mid-East Side area.

GSI NOW FORECASTING 1971 DEFICIT

Citing production delays involving two large orders at its St. Louis Car Division plant, General Steel Industries is now forecasting that it "will not operate at a profit for the year 1971." GSI President W. Ashley Gray, Jr., said the St. Louis Car orders "call for the production of advanced, new design rapid transit and commuter cars, and engineering and manufacturing problems have proven much more difficult to solve than is usually the case."

KATY INDUSTRIES TO ACQUIRE BEARING COMPANY

Subject to approval by the Federal Trade Commission, Katy Industries, Inc., plans to purchase Aetna Bearing Co. from Textron Inc. for cash and deferred payments. Aetna is a Chicago-based manufacturer of ball and roller bearings with sales of around $10 million a year. The FTC is requiring Textron to divest itself of Aetna pursuant to a consent order entered on May 22, 1970.

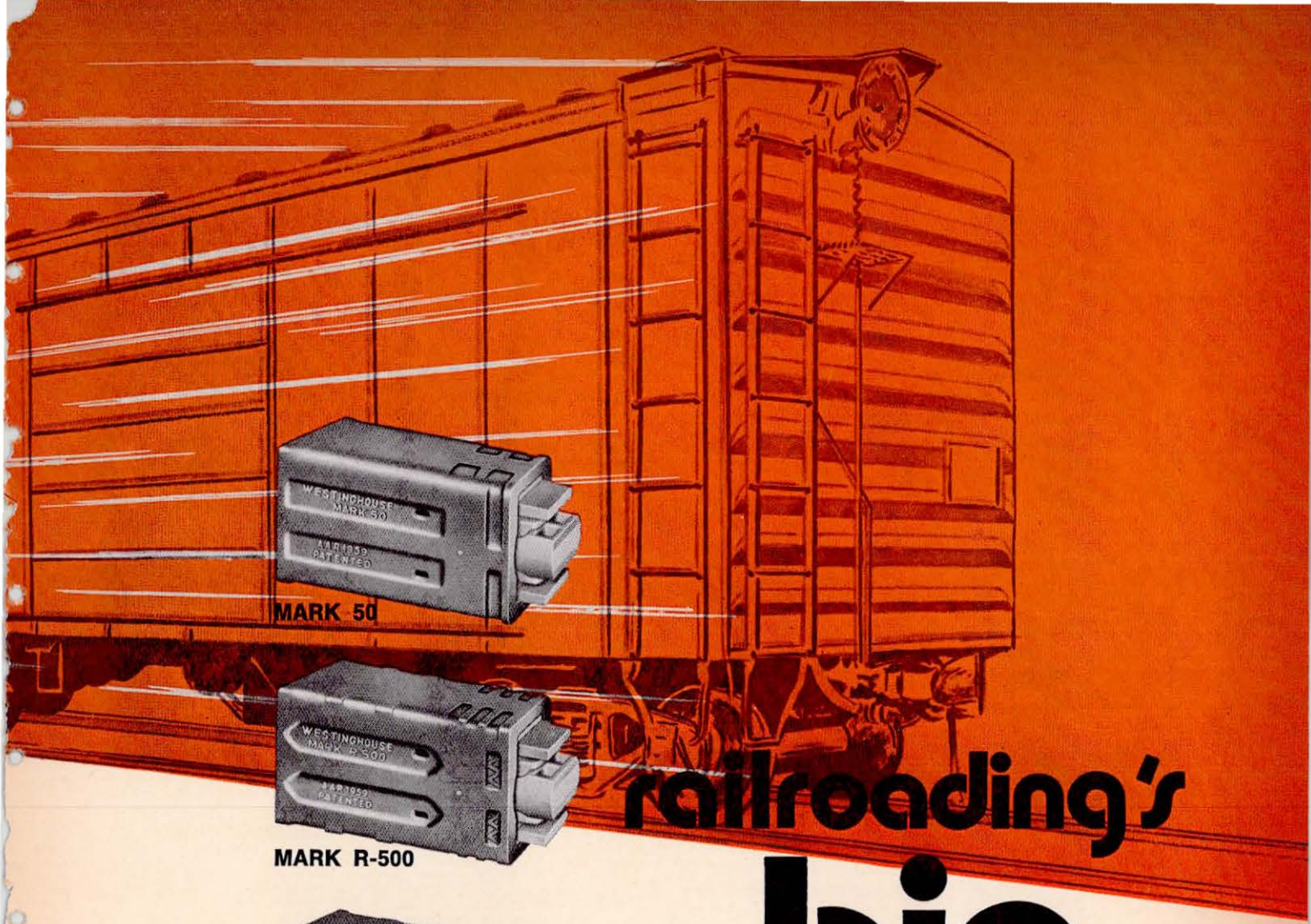
MOVING PEOPLE

VOLPE ASKS MAYORS TO BACK AMTRAK

Addressing the Conference of Mayors in Philadelphia, DOT Secretary John A. Volpe suggested that the mayors of America's cities "could do much in the educational and promotional work needed to make Amtrak succeed." Said Volpe: "It is one thing to plead for continued service; it's another thing to do all you can to make sure the service is used. All of us must always remember that if no one rides Amtrak—which is a for-profit organization—then Amtrak will fold . . . Amtrak is not a guarantee of service. It is a promise. If a small system succeeds it can be expanded."

ISRAEL PONDERS PURCHASE OF BRITISH APT

Israel may be the first foreign customer for British Rail's 155-mph Advanced Passenger Train (APT), which will begin track tests in Britain later this summer. The Israeli government confirmed June 8 that preliminary talks on a sale—"in a very early stage"—were under way in London. The Israeli idea is to use the new train over a 30-mile rapid transit link between Tel Aviv and Jerusalem. British Rail has already spent $7.2 million on APT development; another $9.6 million will be spent before APT enters British intercity use sometime in 1974. Budd Co. has APT rights in the U.S.



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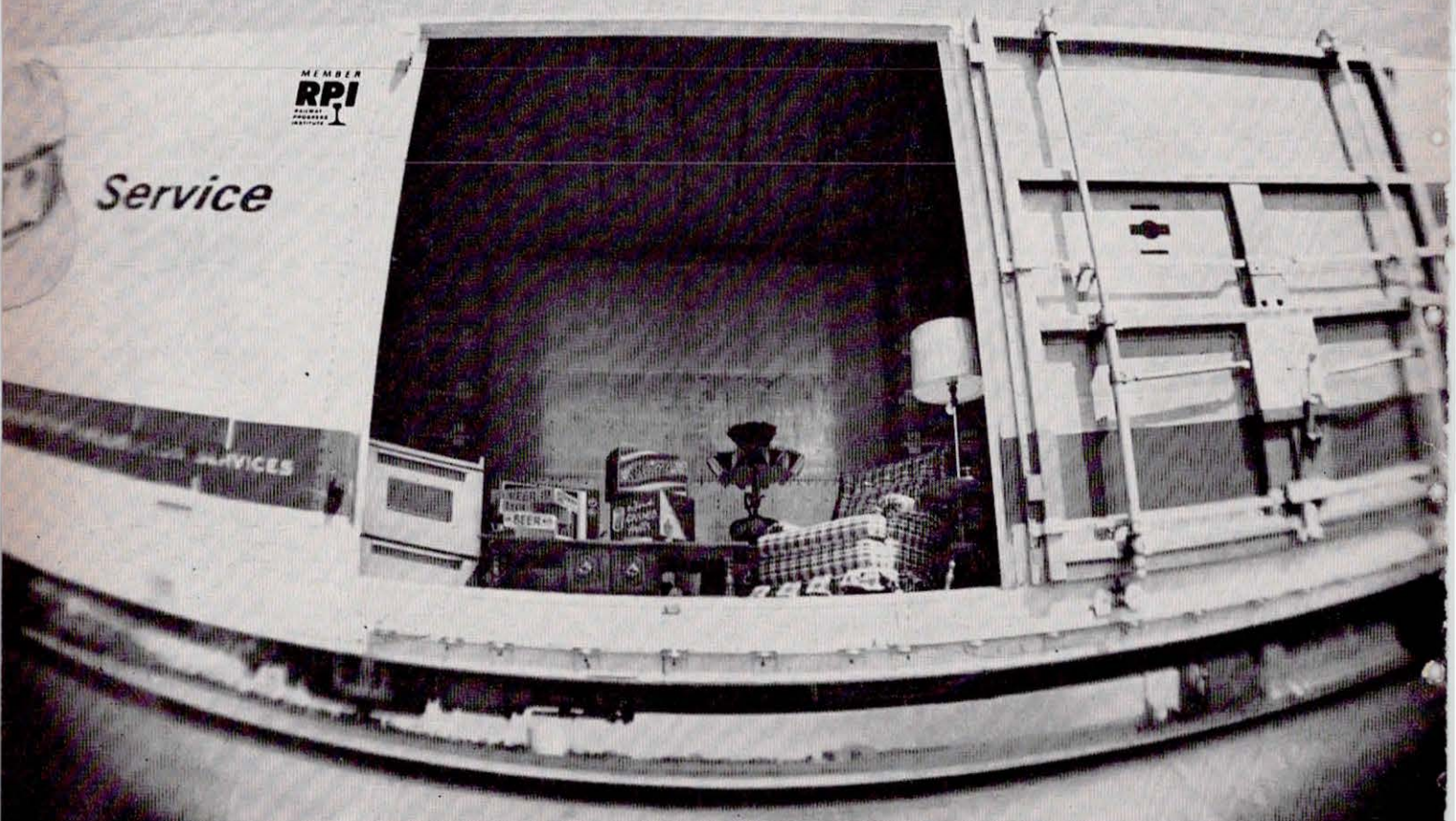

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RAILWAY AGE NEWS

GM, citing L&D improvement, plans wider use of Vert-a-Pac

Railroads and the automobile industry are still a long way from winning the loss-and-damage battle on automobile shipments—but they are making moves which, hopefully, will reverse the trend of steadily increasing L&D payout. Among these moves: Use of new shipping concepts (Vert-a-Pac and containers), development of auto unit trains, use of protective devices on cars, and a stepping-up of route and terminal inspections (RA, June 23, 1969, p. 35; Sept. 28, 1970, p. 37).

Milford Barron, the man in charge of General Motors' logistics operations, recently outlined the scope of the problem—and what's being done about it—before a select committee of the Senate Small Business Committee. He called theft, vandalism and damage "a substantial problem"—and he cited a set of grim figures: Claims on 8% of about 2.25 million vehicles shipped in 1968 . . . on almost 10% of 2.5 million in 1969 . . . and on 12% of all vehicles shipped during the past 12 months."

At the same time, Barron had a positive story to tell:

—The Vert-a-Pac concept, used for shipping Chevrolet Vegas, "has proved so successful that GM is expanding its use."

—During the entire period of testing containerized movement of automobiles, "there was not one instance of theft or vandalism. Because of the success of these tests, more widespread use of containerized car shipments can be expected in the near future."

—Installation of screening or paneling on rack cars "has resulted in some reduction of damage from thrown objects." More than 400 multi-level cars with some form of side protection are now in what Barron described as "experimental use" by GM.

—Route and terminal inspections were begun recently by GM and Penn Central and were to be extended in June to Southern Pacific. Joint inspection teams check damage to determine locations at which it occurs; they also analyze routes to look for situations which may tempt the thief or vandal. In this context, Barron called special attention to unit-train movement of automobiles, which minimizes standing time and thus reduces the opportunity for theft and vandalism. GM, he said, is currently shipping by the daily trainload (cars and parts) from Chicago to San Francisco and Los Angeles and from Toledo to Atlanta.

For the rail industry as a whole, 1970 payout on motor vehicle L&D was almost $30.5 million—up by almost 40% from the 1969 figure. In 1970, motor vehicle L&D represented more than 13% of total L&D payout.

Santa Fe launches anti-L&D campaign

Santa Fe is setting up a new Quality Control Department—with freight loss and damage tabbed as one of the department's primary targets (RA, May 31, p. 40). Vice President-Operations Larry Cena says the approach 'will be similar to our campaign against personal injuries—which reduced our injury rate per million man-hours from 13.60 in January 1969 to just over 4 at the beginning of this year. We're hopeful that applying the same degree of effort to improving the quality of our freight service will have similar results."

Last year, L&D cost Santa Fe $13 million. And, says Cena, "while realistic accounting procedures require us to budget funds to meet loss-and-damage payouts, there will be no 'budget' or acceptable level of such losses. The only acceptable level of service will be one that satisfies our customers completely, with no loss and damage involved. We are setting our sights in that direction."

At the outset, the program will emphasize increased assistance to shippers in methods of loading, packaging and dock-handling; research into improved equipment design; and stepped-up rail employee training. In charge of the QC Department will be Donald G. Ruegg, assistant to the vice president-operations, with a staff of about 50 QC supervisors across the system.

Three-way merger in New England?

The Amoskeag Co., which has a one-fourth interest in Maine Central and a 99.3% interest in Bangor & Aroostook, wants to see a merger of those roads with Boston & Maine. Amoskeage's proposal was made at a conference called by the ICC to consider ways of keeping the bankrupt B&M in business.

Meanwhile, evidence was presented tending to show that the B&M's cash crisis was not as severe as it may have seemed when the ICC called the meeting. As of June 15, B&M's cash totaled $4.48 million, up $2.25 million from May 14, 1970, when the present trustees took over. Operating revenues in January-April rose $2.7 million.

FOR FAST SERVICE
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The ACI Scanner

Mr. P. H. Galloway, President of the Peoria & Pekin Union Railway, has announced plans for installation of an ACI Systems Corp data collection system.

As you know, our primary goal at ACI Systems Corp is serving railroads in ACI and transportation control. Therefore, we are very proud of our affiliation with the P & P U and their confidence in our technology and capabilities.

Founded in 1881, the P & P U serves the Peoria Gateway, fifth largest rail center in the U.S. Peoria is terminal or ratebreak point for 12 railroads and freight is moved through Peoria in a matter of hours on its way to the East or West Coast.

Plans call for initial installation of nine ACI Rail Scanners multiplexed to three ACI Label Decoding Processors. The Processors will connect to the Terminal Computer in their Data Processing Center.

Describing the overall benefits, Mr. Galloway stated, "Our ACI System will permit us to increase reliability of P & P U services, generate greater utilization of equipment and facilities, reduce operating expenses and improve security."

More specifically, our Scanners will make it possible to develop valuable reports and services, including inventory of cars to and from connecting lines; switch lists; joint facility accounting; demurrage accounting and protection for industries; and performance of repair facilities . . . to name a few.

This installation will also introduce a new technique featuring Supplemental Labels which allow recording of repetitive waybilling code numbers for automated preparation of waybills.

We'd like to tell you about the new ACI technology, and work with you to achieve your ACI objectives!

W. H. Thompson
President

ACI SYSTEMS CORP

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Circle 8 on coupon page 35

Task force endorses M/W trust fund

A high-level labor/management task force has recommended establishment by the Federal government of an "interstate railway transportation trust fund" which would "create the funding base for track and roadway improvements and maintenance." A portion of such a fund would be earmarked for research and development, following the precedent of the Highway Trust Fund.

The task force's recommendation was accepted "in principle" by the railroad industry's Labor-Management Committee, a group of top management and union executives, at a time when the M/W trust fund idea appears to be gaining wide support. The creation of such a fund—by imposition of a waybill tax, with matching funds supplied by the railroads—is known to be part of the Department of Transportation's proposed railroad legislative package now undergoing scrutiny at the White House.

Two task forces were activated by the Labor-Management Committee some time ago—Task Force I (Terminals) and Task Force II (Track and Roadway). It was the latter which endorsed the trust-fund concept. Its other funding recommendations included:

—Creation of a billion-dollar loan "pool" of Railroad Retirement Board funds for railroads under government guarantee, at one-half per cent higher rate than the prime rate, for specfic improvements to facilities and services.

—Support of the ASTRO tax reform recommendations involving amortization of grading and tunnel bores, rapid amortization for such projects as electrification, line changes, terminal improvements, signaling and communications, and computerization; plus restoration of the investment tax credit for rolling stock acquisitions.

—The same kind of capital construction reserve as provided for the Merchant Marine under Public Law 91-469.

—Disaster loans for railroads.

The conclusions of Task Force I were aimed at improvement of information flow between terminals; improvement of facilities and terminals through experiments conducted at a pilot project at East St. Louis; and a study of changes in rules, rates and agreements on terminal operations. These experiments, noted the task force, "may require rate freedom and the ability to temporarily suspend government regulation."

FRA publishes proposed track standards

Railroads will have until Oct. 15, 1972 to bring existing tracks into conformity with Federal track safety standards. However, the effective date for newly constructed track and rebuilt track is Oct. 15, 1971.

These dates are given in a "notice of proposed rule making" scheduled for publication in the Federal Register June 23.

The notice includes the initial Track Safety Standards as developed by the Federal Railroad Administration in accordance with the Federal Railroad Safety Act of 1970.

Interested parties "are invited to participate in the making of these initial track safety standards by submitting written data, views or comments." Communications received before July 31, 1971, will be considered by the FRA before final action is taken. The notice indicates that the proposed standards may be changed "in light of comment received."

In developing the proposed initial standards the FRA said it considered information regarding existing safety data and standards made available to it by the Association of American Railroads, the railroad industry, railroad labor organizations and state regulatory agencies.

It notes also that informal meetings were held with representatives of these groups to assist "in the refinement of the information."

Seminars set for FRA track inspectors

Federal Railroad Administration personnel who will be engaged in track inspection work under the Federal Railway Safety Act will attend a two-week seminar on the fundamentals of track technology at the University of Illinois, Urbana, Ill., beginning July 12. The seminar is scheduled to be repeated. The program is being organized by W. W. Hay, professor of civil engineering at the university. Material on the technology of the track itself will be presented by Prof. Hay. Other professors from Illinois will deal with various other phases of the subject: H. O. Ireland, soils and the roadbed; E. J. Barenberg, drainage; and N. Khatchaturian, structures.

Probe continues in Amtrak/IC accident

It was the first serious passenger-train accident since Amtrak took over—and it happened to the Chicago-New Orleans "City of New Orleans," operated by Illinois Central. The train derailed near Salem, Ill. Eleven persons died, more than 90 were injured. Preliminary investigation indicated that a wheel or wheels locked on the lead locomotive unit, slid for a mile or more and derailed at a switch. Railroad and governmental investigations are continuing.

Pullman protests aerospace "subsidies"

The U.S. Department of Transportation's award of a $10.5-million railcar contract to the Boeing Co. has brought a sharp protest from an established carbuilder, the Pullman-Standard Division of Pullman, Inc.

Said George L. Green, executive vice president of the parent company: "I find it difficult to understand why the Boeing Co. as a hardware manufacturer should be subsidized to the extent of millions of dollars for something which many companies, including Pullman-Standard, are able and willing to do as a part of any production contract."

Green's comment came after DOT Secretary John A. Volpe on June 18 announced that he had given a three-year contract to Boeing's Vertol Division, which for some months has been exploring entry into the transit market, for systems management of DOT's "Urban Rapid Rail Vehicle and Systems Program."

Under the $10.5-million contract, Vertol is to produce two transit cars representative of the "state-of-the-art" in carbuilding today, to be demonstrated on various transit systems and subsequently to be used as "laboratories" at DOT's new High Speed Ground Test Center at Pueblo, Col. The Boeing subsidiary is also to conduct a design competition for an advanced concept train "which is expected to provide a totally fresh approach to transit car design."

Volpe said "we are hopeful that aerospace techniques, such as airframe construction and component modularity, can now be applied to transit cars."

In his statement protesting "subsidies" to the aerospace company, Pullman's Green said that while Pullman-Standard was invited to bid on the DOT contract, it "turned the opportunity down and chose to concentrate its engineering efforts on potential production orders for badly-needed commuter and transit cars."

Green added: "Despite our rail car building expertise, garnered over 103 years of experience, the Federal government continues to channel millions of dollars to companies out of the railroad field to find the answers we already know. Over the years Pullman-Standard has given the rapid transit field everything that is new in the 'state-of-the-art' from our Champ Carry Technical Center."

In recent years, said Green, Pullman-Standard has repeatedly offered to supply such equipment on a production basis at a fraction of the cost anticipated by DOT from Boeing. Such offers, he added, have been consistently rejected.

Green was specific:

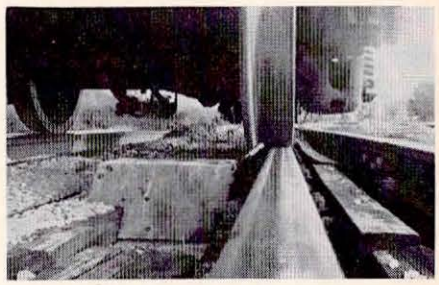
"A recent example was the rejection by DOT on Jan. 26, 1971, of proposals offered by Pullman-Standard for 144 commuter cars for the Southeastern Pennsylvania Transportation Authority. The proposal contained optional techniques which provided significant advancements in the state-of-the-art not previously available in the United States and at reduced costs. Similar rejections have been written into specifications currently awaiting bids for cars for use in Washington, D.C., and San Francisco."

BN helps Japan speed autos to market

Nearly 3,500 Datsun cars and trucks make their way to Chicagoland markets via auto rack each month as the result of a mid-May agreement between a major Japanese automaker and Burlington Northern. Loaded 18 per car on trilevel auto rack cars at Seattle, Datsuns are making fourth-morning appearances at a terminal just west of Chicago.

The new routing out of Japan, according to M. M. Scanlan, BN marketing vice president, "represents the most economic utilization of all transportation facilities." It will save almost 11,000 miles or 22 days for the cargo-liners sailing to U. S. ports. The vessels, owned by the Datsun's manufacturer, Nissan Motor Corp., once operated into eastern ports only, requiring 40 days for a round trip, compared with 18 days using the Seattle port.

In the first quarter of 1971 before route selection was made final, BN made several experimental runs.



Scale conversion: Fast, inexpensive

Southern's scale installation at Sheffield, Ala., has been brought into the electronic age—with a modest investment which allows the scalemaster to weigh cars of any length, uncoupled-in-motion or statically. Southern had a static, mechanical beam scale at Sheffield. Railweight, Inc., devised a triggering system which made it possible to upgrade the existing facility with virtually no new steel or concrete work required. Equipment added to the scale included a 1,000-pound tension load cell and four sensing track switches mounted on the weigh-bridge. The control console was placed in an existing scalehouse adjacent to the weigh-bridge. Weights of cars passing over the scale appear on a nixie-tube display on the console; and the system is also tied into a ticket-printer, which provides a printed record of each car's weight.

The story behind Arizona's new railroad: Heap big fuss over a slurry pipeline

A century ago, the Navajo Indians in Arizona viewed the coming of the railroads with something less than warm smiles. In 1973, however, the nation's newest railroad will start operations in Arizona with solid backing by Navajo and Hopi tribes. Indians will even help build the new line.

The Black Mesa & Lake Powell Railroad is being built to move coal from Peabody Coal Company's Black Mesa mine near Kayenta, Ariz., 78 miles to the Navajo Generating Station now under construction near Page in northwest Arizona. The station will be the state's largest power plant. It would have been served by a slurry pipeline if the Indians hadn't intervened.

Originally, Peabody planned a slurry line similar to the 273-mile pipeline operated by Southern Pacific Pipe Lines, Inc., to move coal from Black Mesa to an electric plant on the Colorado River near Davis Dam, Nevada.

A slurry line, however, requires good water supplies. Pulverized coal moves through a slurry in a 50-50-mixture with water. The Navajos told Peabody they wanted no further burden put on their ground water resources. A spokesman for Arizona's Salt River Project, one of the participants and the manager of the BM&LP, says it could have been shown that wells for the slurry would be drilled deep enough to avoid affecting Indian water resources. However, the issue was not pressed and rail was chosen.

A spokesman for Southern Pacific Transportation Company says Southern Pacific Pipe Lines officers agree it would have been cheaper to build and operate a slurry. (Initial reports from Phoenix had suggested that a railroad had been chosen over a pipeline because rail would be cheaper—RA, March 29, p. 16.) Other factors for economic feasibility were present in the Navajo Generating Station transport picture: large continuing demand to a single destination, large supply of coal at point of origin, absence of existing volume transportation facilities.

The decision to be made after a choice of mode, was choice of locomotive type. Here, cost became the deciding factor. Three new electric units will cost at least $456,000 each, which is considerably higher than the diesel-electric locomotives considered, ranging from $250,000 to $298,000 per unit, according to Morrison-Knudsen, the BM&LP builder. Diesel-electric, however, would have to be replaced after 17 years, while the electric locomotives are expected to last the lifetime of the BM&LP. "Over the 35-year life of the railroad, we will save hundreds of thousand of dollars by using electricity," says Les Alexander, associate general manager of the Salt River Project.

Also, it would cost more initially for diesel-electric locomotives, M-K says, because five diesel-electrics would be needed for a 73-car unit train, but only three electric locomotives are needed. That puts initial cost for diesel-electric power at $1.5 million to $1.78 million, compared with $1.36 million for electric locomotives. Replacement costs after 17 years are estimated from $2.9 million to $3.48 million for diesel-electrics, compared with zero for the electrics. Total cost after 35 years: $4.4 million to $5.2 million for diesels and $1.36 million for electrics.

How Amtrak chose its routes

The 16 routes which with Amtrak started business were selected on the basis of "probable profitability" and seven other criteria, says Charles C. Shannon, president of Wyer, Dick & Co. It was this Montclair, N.J., consulting firm that worked with the Federal Railroad Administration and the ICC in determining intercity passenger-service losses—a study which Shannon says "helped provide the impetus for the establishment of Amtrak."

The routes finally chosen by Amtrak had to pass these tests, in addition to "probable profitability," says Shannon:

—Total transportation needs.

—Service demands on each route.

—Cost of service on each route.

—Adaptability of the routes to a total national rail network.

—Population area served.

—Flexibility of management by Amtrak.

—Extent of capital improvements required.

Shannon pointed out that Amtrak officers have the "flexibility and authority" to add new routes—but areas to be added to the network need firm evidence that they meet "all or most of the eight criteria."

Toronto gets first of 76 new cars

Hawker Siddeley Canada has delivered the first of 76 new cars to the Toronto Transit Commission. In-service testing will begin this summer as more cars are delivered.

The new cars, each costing $155,000, will be used on the Yonge subway extension, the first four miles of which will open in the spring of 1973. They will also be used to meet rising needs on Toronto's existing subway lines.

The cars now being delivered are similar to 164 cars previously ordered by TTC from Hawker Siddeley. When delivery is completed, Toronto's fleet will total 410 cars—134 British-built 57-ft cars, and 276 Canadian-built lightweight 75-ft cars.

Car financing: The ICC's alternative

Everybody agrees that freight-car supply must be increased. How it's to be accomplished continues to be debated before a special Senate Commerce subcommittee.

These viewpoints were expressed at recent hearings:

Representing ICC, Chairman G. M. Stafford and Commissioner Rupert L. Murphy called for a "dramatic" increase involving "billions of dollars" through government action. That action could best be effected, they said, through a variant of S.1729 and S.1730, two bills already introduced—the former backed by labor, the latter by NIT League and AAR (RA, May 31, p. 11). They insisted any freight car corporation must be deemed a railroad, as proposed by S.1729, and subject to ICC rules.

With respect to S.1731, the equipment insurance bill supported by the AAR, the ICC officials said it should be supplemental to S.1729 or S.1730 and not in lieu thereof.

They went on to propose an alternative which would incorporate parts of both the freight car corporation bills, beefing up ICC authority over the corporation. In general, their alternative adopts the NIT League proposal for $30 million raised from a per-diem surcharge and $3 billion through sale of Federally-guaranteed obligation. They would exempt the car corporation from Federal income taxes, subject its cars to standard per diem charges plus an incentive surcharge, and require mandatory interchange and transport of empty corporation cars.

General Mills Transportation Vice President William K. Smith opposed any Federal corporation, and said if a national corporation is needed it should be privately funded and managed, like Trailer Train.

Dwight L. Koerber, executive secretary of the Coal Traffic Bureau of Northern West Virginia and Western Pennsylvania, strongly endorsed S.1731, saying, "With no intention to indicate any priority . . . we believe that extension of quick write-off provisions to private car owners, the investment credit, and other tax incentives, and guaranteed loans for railroads who acquire cars, will produce the sort of action that is responsive to the pressing need of the hour."

Meanwhile, Chairman Harley O. Staggers has announced that he will send his House Commerce Committee's investigations sub-committee across the country this summer to hear rail and shipper testimony on freight car shortages.

Watching Washington

A TFC ON THE WAY?

REID BEDDOW

Important support is developing for creation of a Transportation Finance Corporation, similar to the old Reconstruction Finance Corporation. It looks like the idea will go in Congress. Senate Commerce Committee Chairman Magnuson has expressed his interest. The AAR's board likes the idea. Federal Reserve Chairman Arthur F. Burns has long supported the concept, broadening it to include all industry. If such a corporation were created, large loans would become available to financially-ailing carriers; and they could be resuscitated without a politically risky recourse to Congress, such as now being endured by Penn Central and Lockheed. Unfortunately, if the old RFC is the pattern, the proposal comes too late to help Penn Central, Central of New Jersey, Boston & Maine or Lehigh Valley.

HOW THE RFC WORKED . . .

RFC was created by a Democratic Congress in just five days in 1932 with the stated purpose of pump-priming business recovery from the Depression. Vastly expanded to finance war plants, its lending powers were sharply curtailed after 1945. More than $60 billion in all was loaned and guaranteed. For most of its life, RFC was sparked by frosty-eyed Texas Democrat and banker, the colorful Jesse Jones. The agency ceased to function in 1956, an extension of its life defeated by one vote in the Senate. Inherently controversial, because of its power and susceptibility to influence peddling, RFC nonetheless returned a profit to the Treasury and enjoyed a minuscule default ratio. Said Jones: "Things nearly always get better if you give them time. That is particularly true with collateral and properties and people."

. . . AND WHAT IT DID FOR RAILS

RFC's Railroad Division was headed for years by John M. Barriger. Under the law, RFC could lend to a railroad only if and when ICC certified the road was *not* in need of reorganization. Also, RFC got authorization in 1938 to buy equipment trust obligations. Loans were made at interest rates of 4-to-5%. In the 1930's alone, rails received $1,054,016,375 in aid. When RFC entered the picture a third of the nation's railroads were already in reorganization. It is likely that another third would have gone under without RFC help. In all, 89 roads received loans or guarantees, including most Class I rails. Jones instilled compliance with RFC strings by telling railroad presidents FDR wanted him to cut their salaries from plus $100,000 to a flat $25,000. After they agreed to the strings, Jones usually cut salaries to $40-$75,000. Legal fees of roads were similarly slashed. Among other conditions: dividends of qualifying roads were eliminated; executive officers were made to live close to the properties (that is why SP's executive offices are now in San Francisco instead of New York; the Katy got a loan on condition its president spend half his time on the system); often operating officers and directors were dictated.

Lines on Labor

PC: SIMILAR—BUT DIFFERENT

There is something hauntingly familiar about Penn Central's bid for the freedom to decide how many train-service employees shall be used in freight operations. So far as conductors and trainmen are concerned, PC proposes to "eliminate all restrictions on the number . . . employed on trains" and to "reserve to management the determination of train crew sizes." And it all brings back memories of 1959—the year in which the railroads generally sought the unilateral right to do a lot of things, including the right to determine how many crew members should be assigned.

There are, of course, significant differences between the assault on outmoded work rules launched by the industry twelve years ago and the attack mounted by PC earlier in June. In '59, there wasn't much talk about employee protection; PC is promising "reasonable protection to affected employees." In '59, the industry wasn't what you could call healthy; but it was certainly in better shape than the PC of 1971. And in '59, the industry was pretty much on its own; it did not have a Federal judge and the Congress peering over its shoulder, as PC does today. The differences may make a difference.

MANY "SCRIPTS" ARE POSSIBLE—BUT WHICH ONE IS LIKELY?

The question, of course, is "What happens now?" As usual, it's possible to write several scripts for this scene out of the continuing drama of Penn Central. In one, the United Transportation Union plays a cooperative role, rules changes are made, and they live more or less happily ever after. In another, the UTU says "No" to everything and PC goes down the drain. In a third, the battle is joined and the government becomes the force that decides the outcome.

On the face of it, UTU's position is less than secure. PC's bankruptcy-court judge has issued a warning about approving further wage increases if work rules are not revised. Congress and the Administration are deeply concerned, out of necessity if not by choice. And in the House of Labor itself, the Brotherhood of Locomotive Engineers has in fact agreed to a rules-change package.

For its part, Congress—though concerned—would prefer not to act. But in the end, Congress may not have that option. PC's trustees have said that the outcome "depends in principle measure on what happens in one vital field—labor relations." The judge has indicated his awareness of the labor problem. And it's quite possible to see developing, maybe along about Labor Day, a labor/financial/judicial/legislative crisis that only Congress can prevent from ending in disaster.

LABOR ACTS FOR TODAY—BUT HOW ABOUT TOMORROW?

Hope springs eternal. And so you continue to hope that organized labor will see—in time—where the course of intransigence is taking both the industry and the employee. Or, to put it another way, somebody at some point is going to have to pay for the monuments-to-militancy which some of labor's leaders seem determined to build today. And in labor, the "somebodies" who get stuck with the check can only be the men who rise to leadership tomorrow—they, and the average, wage-earning, dues-paying employee.

Penn Central will get its cars back

The Case of the Great Boxcar Robbery ended on a muted note June 16 with a settlement between opposing counsel.

It was on March 18 that the FBI seized about 100 cars on the tracks of the La Salle & Bureau County Railroad, a short line near Chicago. Penn Central had complained the line was repainting unauthorized PC cars and sending them out under LS&BC markings.

Subsequently, PC filed a civil suit against Diversified Properties, Inc., Magna Earth Enterprises, and Joseph C. Bonanno, owner of the two firms, which occupy a car repair shop along the LS&BC. In all, 638 PC cars were delivered to LS&BC, of which only 446 were supposed to be valid deliveries. These were bought by Diversified for $1,000 each under an agreement with Equitable Life Assurance Society, holder of the original equipment obligation on the PC cars, and were to have been reconditioned and rented to other roads.

In court hearings before U.S. District Judge John Fullam, supervisor of PC's reorganization, it was alleged that the Bonanno group actually received 638 cars, or 172 more than ordered. At least 305 cars were unauthorized deliveries, according to PC.

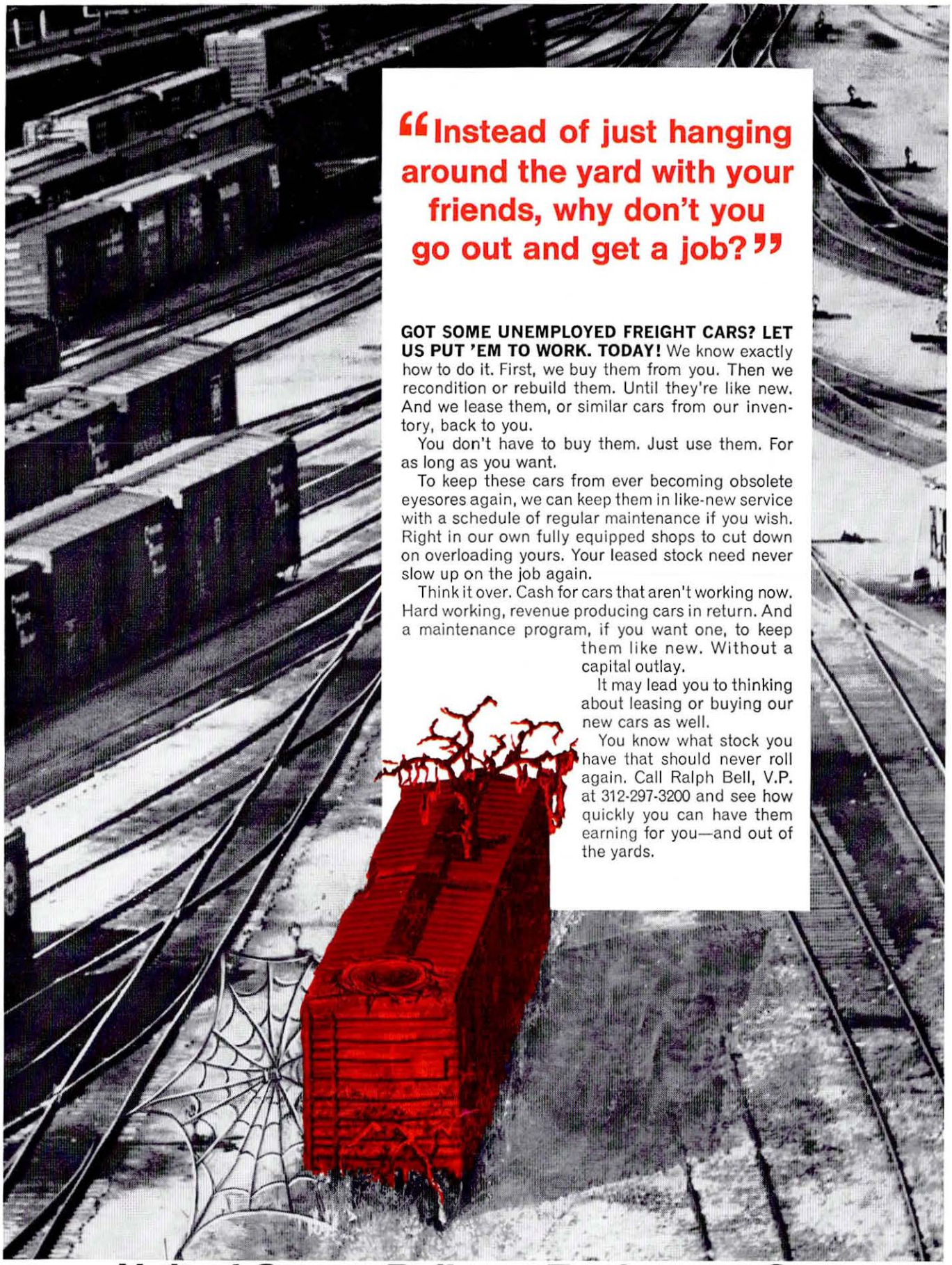
How the extra cars got there remains a mystery. PC was unable to prove conspiracy between the Bonanno concerns and LS&BC and any PC employee. Federal investigation of the case is known to be continuing.

Under the settlement, PC will receive $150,000 and recover 352 cars. No party to the case specified how that figure was arrived at.

Goodfellow gets Exposition post

DOT Secretary John A. Volpe has appointed Thomas M. Goodfellow, chairman (and former president) of the Association of American Railroads, as head of the Transportation Associations Coordinating Group for the U.S. International Transportation Exposition to be held at Dulles International Airport, Washington, May 27-June 4, 1972.

In the announcement of Goodfellow's appointment, Volpe emphasized that "advanced forms of transportation from all modes—and, sea and air—will be featured at the Exposition. One problem: Dulles has no rail spur.



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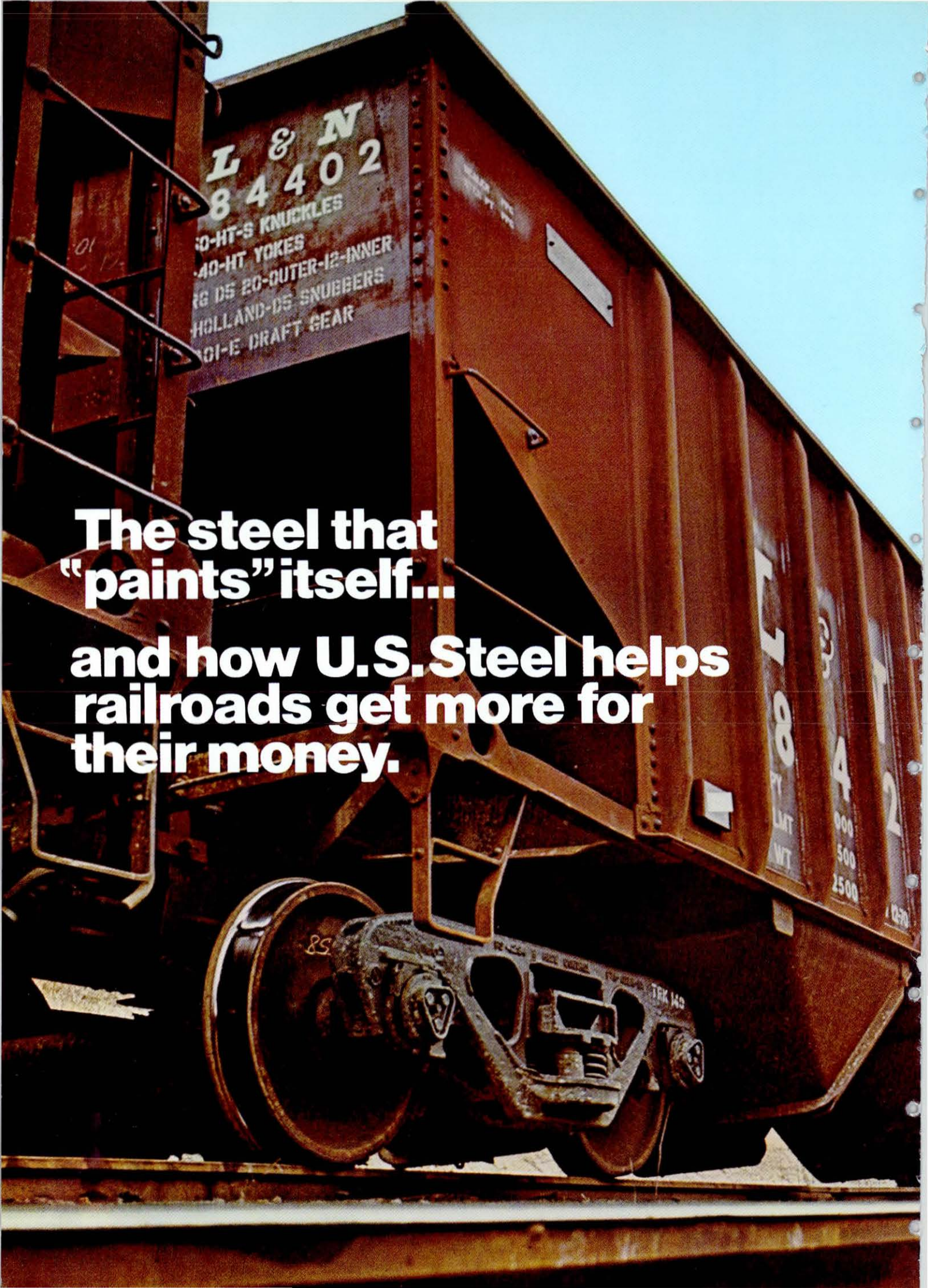

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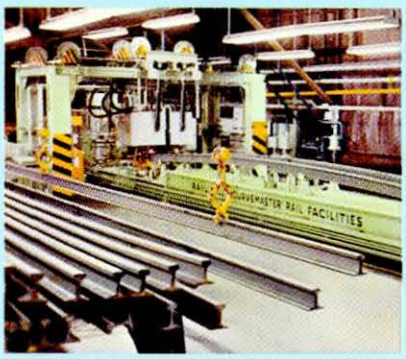

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Birmingham, Alabama....322-1791	Lake Charles, Louisiana....439-2772	Richmond, Virginia....288-4087
Boston, Massachusetts....542-8744	Laredo, Texas....723-3021	Rochester, New York....235-8320
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Cleveland, Ohio....861-6617	Mexico City, Mexico....546-5056	San Antonio, Texas....924-5011
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Denver, Colorado....623-3238	Mobile, Alabama....433-6918	Shreveport, Louisiana....686-7261
Des Moines, Iowa....288-4819	Monroe, Louisiana....322-3191	Springfield, Missouri....869-0729
Detroit, Michigan....352-9440	Monterrey, Mexico....543-01-84	Texarkana, Arkansas....793-4062
El Dorado, Arkansas....863-8158	Nashville, Tennessee....244-5130	Tokyo, Japan....591-9376/7
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Container Corp. of America's S.H. Tippett:

"Be willing to experiment"

A major railroad customer (103,000 carloads shipped and received a year), Container Corp. of America is also a major innovator with proven track records in L&D-prevention and demurrage reduction.

By **GUS WELTY,** Senior Editor

By any measure, Container Corporation of America is a major shipper—but it's also an extraordinarily common "carrier."

The average shipper, large or small, can usually afford to concern himself primarily with his own shipping problems, and CCA has its share of those. But by the very nature of its business, CCA also has to have deep concerns for the transportation problems of its customers. Reason: The ubiquitous paperboard box comes close to being the primary "carrier" of much of today's commerce—and the box is a big part of CCA's business.

On its own account, Container's total freight bill runs to about $40 million a year—heavily oriented to rail transportation and with a high percentage of inter-plant movements. Last year, for example, CCA shipped and received 103,000 carloads—with better than 90% of the raw materials for folding-carton and corrugated plants received by rail.

● **How CCA operates.** When Vice President L. E. Williams and Director of Traffic S. H. Tippett talk about CCA's own transportation operation, several points stand out:

—There has been a steady increase in average tons per carload from CCA mills. The mill at Fernandina, Fla., for instance, will ship about 40 cars a day. In 1959, the average load was 78,000 pounds. Last year, it was close to 105,000 pounds. During the same period, the average load on shipments from mills over-all has climbed from about the same lower figure to a shade under 100,000 pounds.

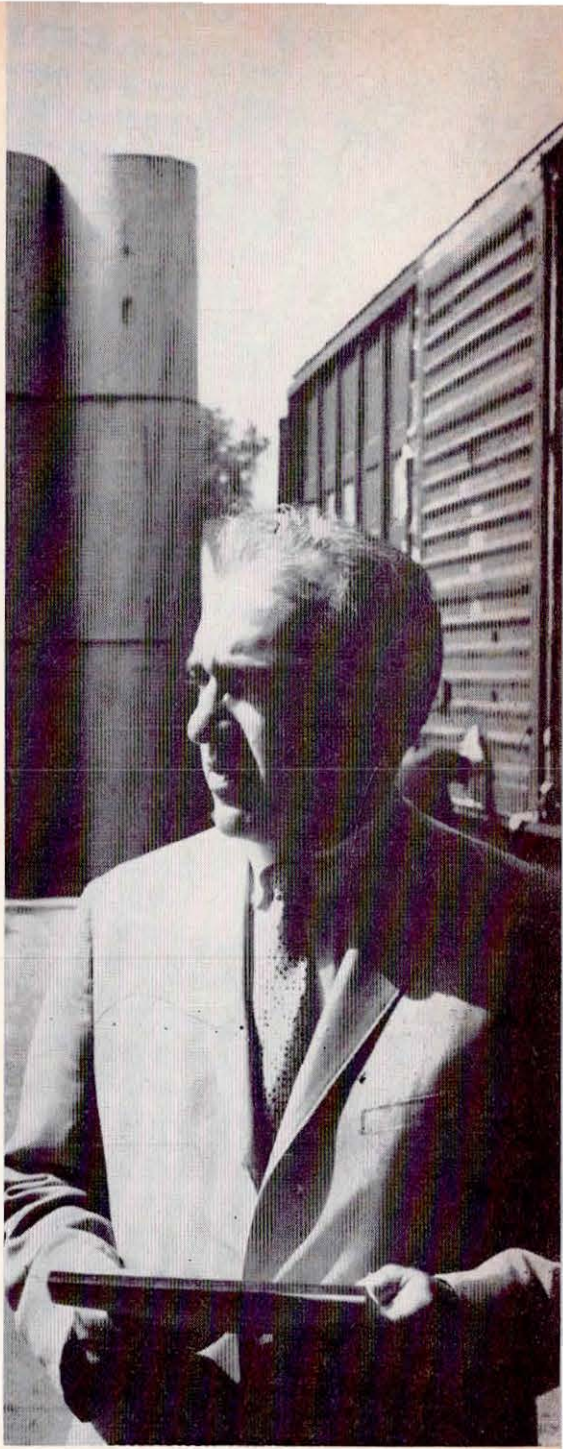
—Few if any users of rail transportation pay more attention to the elimination of demurrage. For CCA, 1970 saw a demurrage figure of 14.7 cents per car. In contrast, rail industry reports (for 1969) showed the over-all average at almost $3.60 per car. CCA has 82 domestic plants. Of those 82, 58 wound up with no demurrage last year. And, Stan Tippett notes, some of those plants have a no-demurrage record stretching back for years and years.

—Container has been and is a substantial force in improvement of rail equipment and its damage-preventing devices. CCA traffic people say they were first to use inflatable dunnage. When cushioned cars were a novelty, CCA leased a few to demonstrate the heavy-loading, revenue-building and load-protecting features of the cars. Now, CCA is working with several railroads and a carbuilder on development of a 60-foot, high-cube box car. At last report, at least three roads were to be involved in placement of the first orders.

—In working with customers and in handling its own traffic, Tippett and his staff live by two maxims: Be willing to experiment. And leave nothing to chance.

● **How to trim demurrage.** Container's success with its no-demurrage programs has been especially noteworthy—not just from the standpoint of dollars-and-cents or utilization of equipment, but also for what this success means in relation to CCA's total operations.

In a way, Container's operating pattern would seem to create a tougher-than-usual problem. Its mills work a seven-day week, around the clock. Its box plants are on a five-day schedule. Add to this the possibility of inconsistent transit times, and you come up with a real potential for feast or famine



CONTAINER CORP'S TRAFFIC DIRECTOR S. H. Tippett has a major operation of his own to run—with 82 plants and a $42-million annual freight bill. He also has to be concerned with helping Container Corp's customers and the carriers to do a better job.

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Container Corp. of America's S.H. Tippett:

"Be willing to experiment"

A major railroad customer (103,000 carloads shipped and received a year), Container Corp. of America is also a major innovator with proven track records in L&D-prevention and demurrage reduction.

By **GUS WELTY**, Senior Editor

By any measure, Container Corporation of America is a major shipper—but it's also an extraordinarily common "carrier."

The average shipper, large or small, can usually afford to concern himself primarily with his own shipping problems, and CCA has its share of those. But by the very nature of its business, CCA also has to have deep concerns for the transportation problems of its customers. Reason: The ubiquitous paperboard box comes close to being the primary "carrier" of much of today's commerce—and the box is a big part of CCA's business.

On its own account, Container's total freight bill runs to about $40 million a year—heavily oriented to rail transportation and with a high percentage of inter-plant movements. Last year, for example, CCA shipped and received 103,000 carloads—with better than 90% of the raw materials for folding-carton and corrugated plants received by rail.

● **How CCA operates.** When Vice President L. E. Williams and Director of Traffic S. H. Tippett talk about CCA's own transportation operation, several points stand out:

—There has been a steady increase in average tons per carload from CCA mills. The mill at Fernandina, Fla., for instance, will ship about 40 cars a day. In 1959, the average load was 78,000 pounds. Last year, it was close to 105,000 pounds. During the same period, the average load on shipments from mills over-all has climbed from about the same lower figure to a shade under 100,000 pounds.

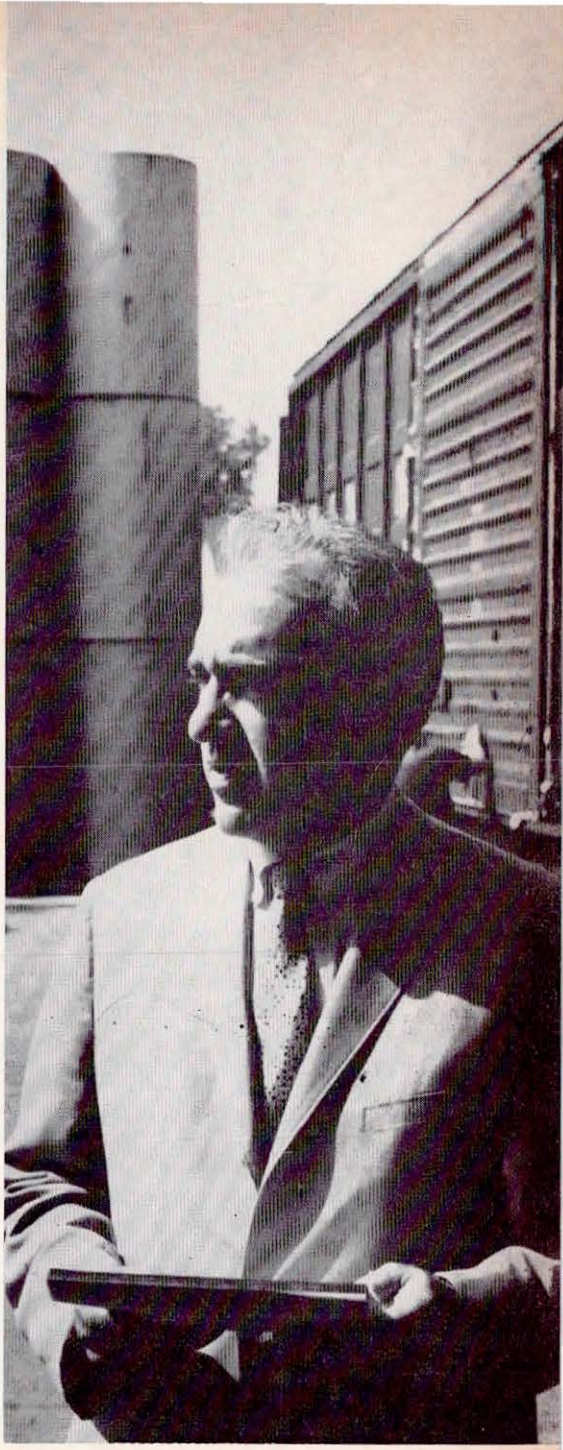
—Few if any users of rail transportation pay more attention to the elimination of demurrage. For CCA, 1970 saw a demurrage figure of 14.7 cents per car. In contrast, rail industry reports (for 1969) showed the over-all average at almost $3.60 per car. CCA has 82 domestic plants. Of those 82, 58 wound up with no demurrage last year. And, Stan Tippett notes, some of those plants have a no-demurrage record stretching back for years and years.

—Container has been and is a substantial force in improvement of rail equipment and its damage-preventing devices. CCA traffic people say they were first to use inflatable dunnage. When cushioned cars were a novelty, CCA leased a few to demonstrate the heavy-loading, revenue-building and load-protecting features of the cars. Now, CCA is working with several railroads and a carbuilder on development of a 60-foot, high-cube box car. At last report, at least three roads were to be involved in placement of the first orders.

—In working with customers and in handling its own traffic, Tippett and his staff live by two maxims: Be willing to experiment. And leave nothing to chance.

● **How to trim demurrage.** Container's success with its no-demurrage programs has been especially noteworthy—not just from the standpoint of dollars-and-cents or utilization of equipment, but also for what this success means in relation to CCA's total operations.

In a way, Container's operating pattern would seem to create a tougher-than-usual problem. Its mills work a seven-day week, around the clock. Its box plants are on a five-day schedule. Add to this the possibility of inconsistent transit times, and you come up with a real potential for feast or famine



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as many as 12 tariffs to get one price. Too eye-wearying paperwork—even with my new bifocals, my eyes get tired scanning the pre-King James language."

There are, he noted, many reasons to be in favor of tariff simplification. But one stands out: "I am interested in tariff simplification, including all that transpires from the initial proposal through the rate factory to the finished product—the published rate—because by streamlining the system we will set free an arsenal of railroad brainpower that can be more effectively used in railroad innovations, innovations which will produce cost reductions and increase profits in ways that will far exceed the cumbersome, unpopular ex parte rate increases."

Costs of the present system, he said, are staggering: (1) The pricing cost applied to movement of a carload of freight costs railroads about two and a half times the per-car L&D cost; (2) similarly, the pricing-to-demurrage cost runs about 8-to-3. And over-all, "it has to be a gross indictment against shipper and carrier, to need so many books to explain what we mean by a freight charge—when all other industries can communicate meaningfully by referring to one book entitled 'Webster.' "

● **.CCA did it.** Simplification is possible—and Tippett has the proof, in a couple of places: Years ago, Container developed a simple chart explaining demurrage—and "it represented the first step taking us to our outstanding demurrage record, a record that has reduced our costs and brought about better utilization of box cars for the railroads." In addition, he notes, CCA has prepared its own rate manuals, which contain "all the pertinent information concerning rail and truck rates in a logical systematic fashion that reduces the paperwork, simplifies issuance of changes and, more important, frees the traffic analyst to work on our programs of planned shipping and measuring total transportation. It's these latter projects that enable us to have efficient total distribution."

Total distribution, of course, is what CCA is all about—and Tippett's files are full of case histories in which CCA marketing, production and transportation people have teamed up to help customers achieve both more efficient transportation and lower-cost transportation. It pays off: The paper industry generally has gone through periods in which production capacity exceeded demand—but CCA has had 13 straight years of sales increases, to a high of $526.6 million in 1970.

IN THE OFFICE OR ON THE DOCK, Container Corp's Traffic Manager-Rail Services E. B. Kelsey makes sure loads are handled as the diagrams say they must be.

● **How about tomorrow?** Tippett and Ed Kelsey aren't complacent. They are concerned that a significant business upturn will recreate rail equipment shortages—and, through the American Paper Institute, they are lending support to shipper- and industry-backed freight-car bills and to reinstatement of the investment tax credit. They are also concerned with the rising costs of transportation—costs which, if present trends continue, may eventually exceed the costs of labor and materials in manufacturing.

CCA's transportation philosophy was perhaps best summed up, a while back, by Executive Vice President F. S. Crysler at a meeting of CCA and railroad people:

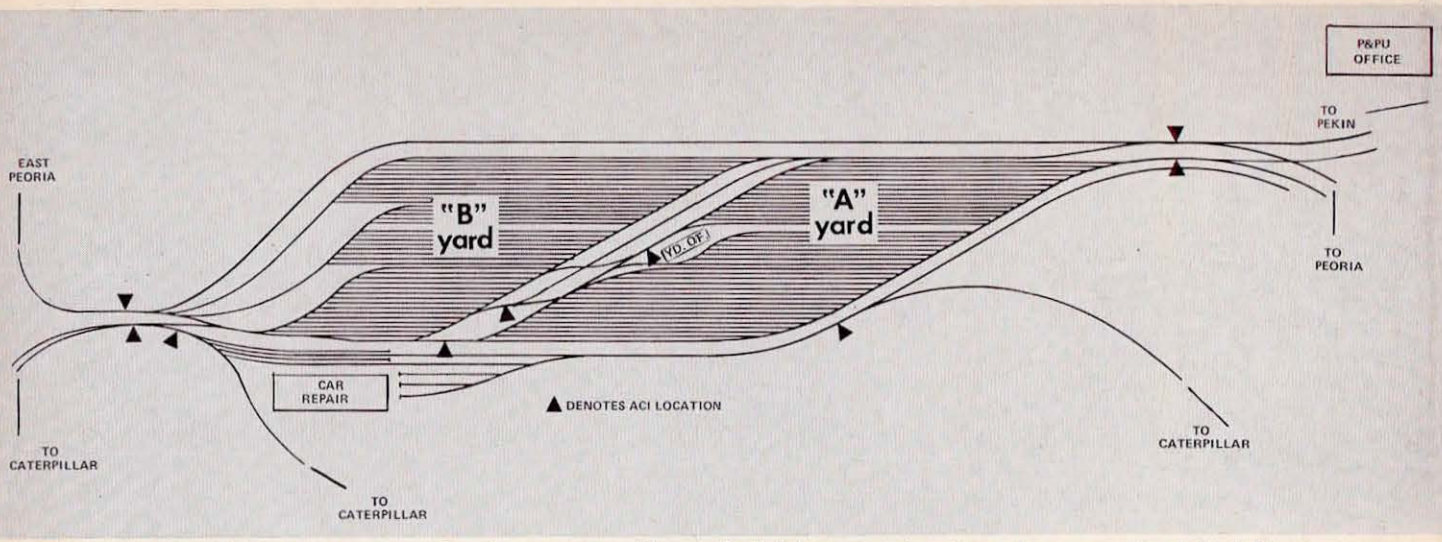
"We need the railroads. They provide our best transportation. At equal cost, we will take the railroad every time. We want low-cost, dependable, low-damage, reliable transportation.

"We will cooperate. We will design movement systems for heavy loading and fast turnaround, with good damage protection. We want the railroads to furnish cars as needed and reliable, regular transportation without bunching of cars. Service doesn't have to be fast, just reliable—although fast delivery is in the railroad's own favor."

Crysler, too, talked about CCA's no-demurrage program and what it proves:

"Going all-out on demurrage reduction did not really save us that much money—but it saved the railroads plenty and proved to them that we mean business on two-way cooperation on transportation problems. We believe we deserve the railroads' attention, and we believe we have earned it. We believe the railroads make more money on CCA business than on any comparable business available to them. We need the railroads' continued help—and we intend to help them, to keep them on our side."

Stan Tippett agrees: "When I express criticism, I don't want to seem as if I'm leading a cavalry charge against the railroads. Railroads have been good to my industry. They truly have been the low-cost carrier. And we have progressed together." ■



NINE ACI SCANNERS, as shown on the above map, will record all inbound and outbound movements at East Peoria.

ACI helps open Peoria gateway

Peoria & Pekin Union installation to cut yard time by about four hours.

By ROBERT W. McKNIGHT,
System Controls Editor

There's good news for shippers through the Peoria Gateway. Cars handled by the Peoria & Pekin Union will probably spend about four hours less time in its East Peoria, Ill., yards because of installation of Automatic Car Identification scanners, with the output tied in with P&PU's teleprocessing and computer systems.

P&PU has placed in service a data-collection system consisting of nine ACI scanners strategically located to record all inbound and outbound movements at P&PU's East Peoria "A" and "B" yards.

● **Increase service.** "Our new ACI system will make it possible for us to increase reliability of P&PU services, generate greater utilization of equipment and facilities, reduce operating expenses and improve the security of our operation," says P. H. Galloway, president and general manager. The ACI system will scan 4,000 to 5,000 cars daily. Additionally, a major benefit will be a 17% reduction in clerical forces for the railway serving the Peoria Gateway, the fifth largest rail center in the nation.

At the entrance to B yard (North End), three ACI scanners will catch all moves including outbound pulls. Similarly, three scanners at the entrance to A yard (South End) will scan all cars moving into and out of that yard. In the area between the yards, known as the crossover tracks, three more scanners catch transfer moves between the yards and internal switching.

Equipment, furnished by ACI Systems Corp., includes three label decoder processors (mini-computers) which handle the input from nine scanners through a new multiplexing technology. The LDP's (Digital Equipment Corp. PDP-8E) provide message generation, train reversal detection, format control and other optional capabilities. Each LDP is considered to be a 1050 station on P&PU's 1050 teleprocessing network. The network is controlled by the road's central computer, a Honeywell 115, with 32k memory.

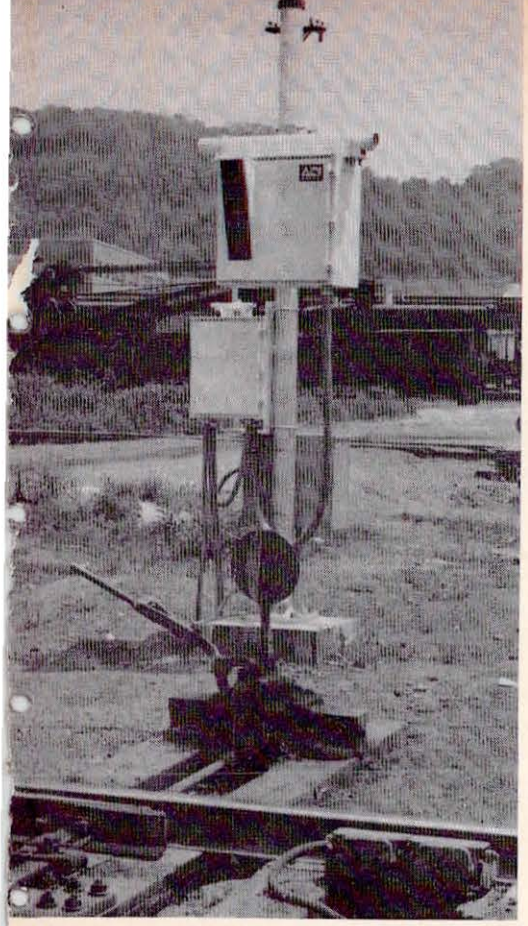
ACI is added to P&PU's present terminal management system, and will provide benefits in the following areas: yard inventory and yard control; car accounting; demurrage and industrial inventory; rip-track control and inventory; customer service improvements, and joint-facility accounting records.

ACI will materially reduce present efforts in keeping yard inventory. The ACI scanners, on the switching leads, provide a record of cars switched within or from and to the A and B yards. Previously, such checks were obtained by clerks. Also, every eight hours a physical check of each forced detention and classification track is made, which can be discontinued because ACI will keep track of cars in and out of yards. The label decoder processors use software routines which produce net scan data output resulting from reverse moves that take place in front of scanners.

● **Interchange time.** Because P&PU is a terminal company owned by Chicago & North Western, Illinois Central, Norfolk & Western and Penn Central it performs interchange service for these railroads as well as non-owners BN, RI, C&IM, GM&O, IT, PT and TP&W. One benefit of ACI is that it provides the official interchange time for P&PU and the roads it serves. For example, certain tracks in A yard may be designated as "IC tracks" which means that when cars are shoved into these tracks, they are officially delivered in interchange to the IC. With ACI scanning cars, the time of the cars placed onto the IC track is recognized as the official interchange time.

P&PU has a perpetual inventory car location (PICL) system which is carried in a disc file—all waybill data for a car is carried in the computer files while the car is on P&PU—and ACI provides a match to the PICL file on a car-by-car basis. Until ACI, it was known what cars stood on a yard track, but a physical check had to be made to determine their exact order, which was necessary for making up the owners' outbound wheel reports.

● **Make switch lists.** From the ACI-generated data of inbound trains, the central CPU makes up the switch lists. These are sent via the 1050 teleprocess-



ing system to the yardmasters and trainmasters. Equipment will tentatively be installed to have 1050 printouts at switchtender locations at the A and B yards.

P&PU also has an incentive for using ACI to provide time checks on car moves because of the complicated per-diem system at the terminal. P&PU receives a handling charge for every car switched, and ACI will provide a more accurate check on this activity, resulting in improved records and revenue.

In the areas of customer service improvements and demurrage, ACI will provide benefits to the railway and to one of its major customers, Caterpillar Tractor Co. All cars that P&PU delivers to or pulls from Caterpillar's East Peoria plants pass ACI scanners. By agreement, the time-and-date of the ACI scan is accepted for demurrage purposes.

● **Secondary label.** Additionally, Caterpillar car movement will soon begin using a secondary label application for outbound shipments. Many of these shipments are of the repetitive type. Some have only the destination as the change, and, of course, the identity of the car, and time and date of the pull from the Caterpillar plant. By agreement between P&PU and Caterpillar, small black and white striped labels—encoded for three digits—will be attached to Caterpillar equipment. The ACI scanner will read the car label and also the secondary label. From information previously obtained, P&PU's computer will prepare the waybill using this scanned information and the repetitive information—such as consignee, consignor, equipment, and so forth. As a result of this use of secondary labels and ACI, considerable clerical effort on the part of the shipper and railway will be reduced, and service will be expedited. With such technology, outbound shipments are billed on arrival at the yard, are immediately classified and depart on the next available train.

For operational usage, a block code number is assigned to each car arriving on the railway. This number contains "from and to" information, and is a guide for switch-list preparation and any switching that may be required. The block code number is placed on disk files on a random basis, and thus does not indicate position of the car on a track. This number is maintained in the file until the car leaves P&PU, and then it is deleted from the file.

All inbound cars are inspected by mechanical department forces. If they find a car without an ACI label, it is bad-ordered and sent to the rip track for labeling and reported as such. Via the 1050 system, the car initial and number are reported to the computer center, where a unique sequence number is assigned to the car. This number is deleted when the car comes out of the rip track and is identified by the scanner. Cars with unreadable labels—determined from ACI scan data—are also tagged with this unique sequence number. By using data-enhancement procedures involving advance consists, conductor's lists, physical location and prior identification, P&PU has been able to match this unreadable car label with waybill data. Its record of matches has been 98% accurate so far. The unique sequence number is carried with the car in the file until the car leaves P&PU. When an unreadable label is identified or indicated by the ACI readout, the original identification of the car can be used to re-identify the car as it moves within and out of the terminal.

● **Reduce yard time.** "Throughput time for cars through P&PU is now about 24 hours, but we expect to cut this to 20 hours or under with full implementation of ACI," reports L. I. Dillenbeck, supervisor-machine procedures. "ACI will be more accurate, and thus we will have complete car records."

For example, P&PU prepares a list every eight hours of the inventory of its yards. Information includes car initial and number, load or empty, and tonnage and may include status information such as received, departure from rip track. Two railroads will use this list to determine motive-power requirements for trains to and from P&PU.

In obtaining car-identification data more quickly, especially for outbound checks, P&PU will materially improve service to the four owning roads, with which it has a data-exchange program. To C&NW, IC, N&W and PC, P&PU is another station on the teleprocessing networks. P&PU transmits data to these roads in their formats. Although it uses the AAR standard format, P&PU's computer is programmed to make the format changes. Also, P&PU receives advance consist data from these roads. It also exchanges data on a teleprocessing basis with the Illinois Terminal.

● **Leased system.** P&PU leases the ACI equipment, including maintenance, from ACI Systems Corp. P&PU furnished the housings—6 by 6 by 8 feet—for each label decoding processor and its associated communications interface. The LDP handles three scanners, all within 1,000 feet of the building. Multi-conductor cable handles communications to and from each scanner, power for the scanner and power for the overlay track circuits that provide a four second turn-on for the scanners. The track circuits—about 100 feet long—are the series overlay type made by General Railway Signal Co.

ACI Systems' LDPs are equipped with test panels which provide for complete diagnostic testing at the location. A jack is provided for connection of a KSR Teletype for providing local readout or for loading the LDP with programs. The programs are written in 8-level ASCII on paper tape which is inserted in the KSR transmitter for loading the LDP. Additionally, ACI Systems communications interface test panel permits operation of the track-circuit equipment and simulation of a car passing the scanner to make a complete check of equipment operation.

Plug-in timers displaying hours and minutes are used to alert maintenance personnel when the 1,200-hour time has elapsed for changing the Xenon scanner lamps. Although such lamps are rated at over 2,000 hours, the 1,200-hour changeout assures high intensity scanning.

The LDPs are presently equipped with 4k core, but can be expanded to 8k or 12k. Present capacity is 400 labels, but a 1,200-label storage capacity could be obtained with an 8k core.

Two Siemens wheels sensors at each scanner location provide wheel count and direction. The scanners are important for providing net scans where reverse moves are made, and also at one

scanner location for providing identity to moves coming from other railroads.

● **Yard inventory test.** In an experiment to determine accurate yard inventory on all yard tracks using wheel sensors, P&PU will be working with ACI Systems Corp. and Abex Corp. on an installation with wheel sensors on five tracks of B yard. Admittedly, at the present time, an incorrect throwing of a switch will cause a misroute, which cannot be detected by the current ACI system. However, with wheel sensors on each track, identification of a car initially in the switching process and subsequent wheel detections will provide monitoring ability into a specific track.

"ACI is making it possible for us to develop a number of valuable reports and services, including inventory of cars to and from connecting lines, switch lists, joint-facility accounting, demurrage accounting and protection for industries, and performance of car repair facilities . . . to name a few," says Galloway. ■

Chicago district weighs ACI

What could a comprehensive ACI system do for a congested terminal area? For one thing, it could make a lot more cars available for revenue loading—a "lot more" precisely estimated at 2,081 cars in a year's time in the Chicago terminal.

This is just one finding of a special task force assigned by the Chicago General Managers' Association to determine the likely impact of an ACI scanner-sharing network. The generation of those additional cars is explained this way:

An advance consist, produced by the district-wide scanner-sharing system could effectively knock two hours from the time a car spends in a terminal yard each day. Those two hours, multiplied by the approximately 25,000 cars which are interchanged in the district each day, can easily be translated into the 2,081 additional cars per year that could be available in Chicago, the study reveals.

● **Shipper benefits.** Not only would this advance consist produced by the ACI system benefit carriers through better car utilization, the study continues, but shippers too would stand to gain. Today, for example, if a shipper in the terminal district should order 30 general-purpose cars, it would take a railroad car distributor three days to round them up and get them to this particular customer's loading dock, the task force figures.

The sources of these 30 cars would be: (1) Empties checked in on the railroad's own yard tracks; (2) empties available on industrial tracks; (3) empties en route to the terminal; and (4) empties on hand at the road's nearest terminal or at other terminals on that particular system. The cars in the latter category, records show, would represent about one-third of the 30 cars ordered and would take the longest time to make their appearance.

Armed with the time-saving ACI advance consist that could be generated the moment a train passed a delivering line's outbound scanner, a receiving road's car distributor could, the task force figures, initiate action which would drastically cut car delays. An entire day might, in fact, be trimmed from the time normally taken to fill the shipper's car order.

● **Time and money.** The detailed report prepared by the task force for GMA serves up this example of how time—and ultimately, money—might be saved in handling cars in the Chicago terminal with the aid of an ACI system:

Today, a train of 50 cars might take over four hours to move from a delivering yard to a receiving yard and finally be prepared for distribution out of the latter. On the other hand, the same train operating in a terminal under control of an ACI system could be ready for distribution in the receiving road's yard in just 3¼ hrs.

While the transit time in both of these hypothetical cases would remain the same, the report points out, the time required to handle cars in the receiving yard would be quite different. The ACI-generated advance consist, for one thing, would cut about 25 minutes from the time normally required to check the train, stamp waybills and prepare and review switch list with yard conductor and switch crew. Another 25 minutes would be saved in the handling of this 50-car train due to the advance knowledge of its make-up, the report continues. Contributing to this savings would be reduced track trimming and shoving because of the early receipt of the advance consist and the added time available to plan for the appearance of the train.

● **Cutting car-hire costs.** Aside from doing a better job of satisfying customers' needs, the task force study adds, railroads would be able to reduce car-hire costs in the terminal if ACI were on the scene. Furthermore, they would be able to cut down on the costly practice of moving empties (oftentimes unnecessarily) from other terminals. If, for example, just 10 cars a day could be placed in the hands of a shipper one day sooner than is now possible, the car-hire savings would amount to almost $2,200 a month, the task force estimates.

A voluminous report on the total impact of ACI on the operation of the Chicago terminal district is now in the hands of the GMA Steering Committee. Aside from pointing out ways in which a scanner-sharing system might benefit carrier and shipper alike through generation of an advance consist, the report goes into detail on all aspects of the network. Various plans for day-to-day operation of the system are outlined, as are potential contractors who could prepare the programming and, if necessary, operate the system.

● **109 scanners, 100 decoders.** Among the firms mentioned as contenders for the contract, or a portion of it, are: ACI Systems Corp.; Executive Computer Systems Inc.; GTE (Sylvania); and IBM. It has been estimated that between $5 million and $8 million in hardware, including 109 scanners and 100 decoders, would be needed to capture all the train movements within the district. Altogether, there are 7,689 miles of track in the CTD over which 1,100 trains are operating in a 24-hour period. The task force has determined that 40 scanner locations would be sufficient to permit complete surveillance of the district.

Fate of the GMA ACI scanner-sharing project is expected to be decided some time this summer. After screening the task force's study, the GMA Steering Committee will make its recommendations to the association's Executive Committee. Final decision on what action will be taken, however, will have to come from the 23 member roads.

If the GMA members should elect to support the scanner-sharing system, in all likelihood a separate, non-profit corporation would be established to direct the operation, one of the member roads reported. It had been estimated earlier that 20 months might be required to make the system operational after the GMA had given the signal to proceed. If the task force's recommendations are followed, equipment for the system would be leased rather than purchased outright. ■

JUNE TRAFFIC POLL:

How shippers tackle L&D

Railway freight loss and damage payout amounted to $228,316,389 in 1970—an increase of 8.7% over 1969. The ratio of L&D payout to gross revenues rose to 1.97% from 1969's 1.92%. In a recent issue Railway Age reported on management's effort to cope with the problem (L&D prevention: Are we losing the battle?, April 26, p. 28). For the shipper's side of the L&D story, Railway Age Executive Editor Fred C. Miles asked for the comments of leading industrial traffic managers and compiled the following summary:

● **Damage-free cars.** "There is no package that can protect from over-safe-speed impacts. We find that damage-free cars are helpful, however. If railroad passenger personnel are being transferred to freight service, the damage problem will solve itself. After a while, shippers will route packaged goods by common truck or (uncarrier) private truck, leaving the rail carriers hauling only bulk freight, which is relatively damage free. Railroad freight-loss-and damage payout will reduce accordingly."—*O. E. Andersen, general traffic manager, Penick & Ford Ltd., Cedar Rapids, Iowa.*

"We have not developed any new ideas, but we have tried to emphasize to our plants to continue to load carefully. We have utilized existing dunnage . . . or our palletized shipments. It is a continuing effort to keep loading personnel aware of the need to load carefully at all times. We use DF cars to minimize damage.

"Regarding the carriers' figures for losses—how much of this involves damage due to derailments and wrecks? The figures for derailments should be divorced from regular damage to give a truer picture of actual damage attributable to the shipper or the carrier. Several years ago the Southwest Shippers Advisory Board asked the carriers to do this, but was not successful. I believe this should be done, or we can be getting a distorted picture."—*Lloyd Philips, traffic manager, Riviana Foods, Inc., Houston, Texas.*

"We have not developed any new ideas in storage or handling. We are pleased with DF equipment, which has performed admirably for us."—*J. J. D'Arcy, general traffic manager, Congoleum Industries, Inc., Kearny, N. J.*

● **Special equipment.** "We are urging all suppliers through the purchasing department to use pallets, either re-usable or disposable, to facilitate unloading. However, we found that we had an increase in damage in some cases and therefore have resorted to DFB cars which seem to have eliminated the damage caused by pallets against bagged merchandise. Unfortunately, our most effective means of reducing damage, particularly molding of milk products, has been to resort to TOFC or truck loads. We have virtually eliminated flour claims that used to run high by going to bulk cars (covered hoppers) instead of shipping in bags."—*Lyman McLane, manager-traffic and transportation, Campbell Taggart, Inc., Dallas, Texas.*

"Our transportation personnel refer to only *one* major transportation department area of L&D-prevention activity, viz.: the increased use of Hydra-cushion cars as against damage-free cars and 'floating unit' loading, as against securing to walls of the car. This is being used for 'skid' loads as well as for jumbo rolls. Improved power tools for strapping the units have made it possible to have uniform pressure all around for a more consolidated unit. DF's have the disadvantage of often missing equipment, equipment using up required cubic, and sometimes even causing damage to certain types of freight. Industrial engineering's contribution has been in the area of testing for and recommending more resistant wrappings and packaging materials, i.e., poly-coated and/or asphalt-laminated wraps. Use of Shrink-Pak for prevention of pilferage, cleaner and drier packages, and greater stability of load during transportation. Unitizing of case and full-capacity loading also have helped to reduce damage."—*Clyde L. Jacobs, manager of transportation, Crown Zellerbach Corp., San Francisco, Calif.*

Specialized equipment ranks high with traffic managers—but the need for good packaging and loading remains urgent.

● **Packaging.** "Despite our packaging having been approved by the AAR classification committee (UFCC) and the National Classification Committee, additional strength has been added by insertions of inner packaging. Damage has been nil. Loss has been the problem. Sealed trailers and containers have been broken into while they were in railroad yards and the goods removed. Probably this situation would be mitigated by maintaining adequate police protection—railroad systemwide."—*J. A. Illes, director of transportation, Outboard Marine Corp., Waukegan, Ill.*

"We are constantly trying to improve our loading and packaging policies. Our loss and damage is controlled by a postcard system our customers are asked to complete and return to us. If any given wholesaler is having a damage problem we try to find out why and then attempt to solve the problem. Our damage rate, we feel, is very low."—*M. F. Tamisiea, general traffic manager, Theodore Hamm Co., St. Paul, Minn.*

"Our good-loading practices have been in operation for much longer than two or three years. Results have been very good. For example, last year our average outbound carload of beer weighed 132,700 pounds, and our overall claim ratio for alleged shipper-caused damage amounted to less than 25 cents per $100 revenue. . .

"We continually remind all who will listen that a better way has to be found to allow changes to be made in packages without going through the cumbersome process we now must use. We contend that without care in warehouse handling, loading, transportation and unloading, the best package will be damaged [whereas] a minimum package with proper handling will be satisfactory. If we as a shipper, after testing, can successfully load and ship a package that is less than the package requirements of . . . Rule 41 . . . why shouldn't we be able to take advantage of it?"—*R. H. Rutledge, traffic manager, Olympia Brewing Co., Olympia, Wash.*

"We have started to wrap cold rolled steel in polyethylene to prevent rusting. The rusting problem has practically disappeared. The carriers are now footing the bill for this expenditure and find it worthwhile."—*R. Bechamp, director of transportation, Dominion Steel and Coal Co., Montreal.*

"Our company maintains a more-or-

less continuous program for updating shipping containers used to carry our various products by all modes of transport. The use of new materials and improved techniques is carefully studied and they are adopted wherever a change is found to be justifiable. This program has proved beneficial insofar as our claims for loss and damage can be considered to be minimum."—*George W. Langston, general traffic manager, Crane Canada Ltd., Montreal.*

"We have not improvised any great changes or 'do it yourself' ideas over the past three years in the packing of our commodities for shipment. On the other hand the classifications—both rail and motor—permit shipment of pipe fittings to be in bundles, bags, boxes, cartons or pieces. However, in this respect we instituted a packaging program in 1969 whereby we endeavored to palletize all shipments made from our Louisville plant. The pipe fittings that we ship are packed either on an open-face-type 40-in. by 48-in. pallet or a pallet box of the same width and length with the depth varying from 12 in. to 32 in. By palletizing our shipments we have reduced our claim ratio from 1.9% to a basis of less than 1/10 of 1% loss and damage."—*C. E. Traughber, general traffic manager, Tube Turns Division, Chemetron Corp., Louisville, Ky.*

● **Photographs.** "During the past two or three years we have been very successful in reducing loss and damage on our outbound products from our Westbrook, Me., mill. One of the things we did for a period was to send a picture with each car showing exactly how the car was loaded and asking the customer to report any damage to us with pictures. From time to time we have also asked our customers to let us know about damage to our product, even if the damage was slight and they were not submitting a claim for the damage. In addition, one of our carriers from Westbrook furnished us with a monthly list of all claim settlements involving our cars which let us pick out troublesome areas and improve the situation with either better equipment or different loading or packing techniques. I am very disturbed on the general situation —despite loss and damage prevention work, the railroads are paying out an increasing amount each year for loss and damage. We tell our customers that we consider it our responsibility to see that our goods are delivered to them damage free."—*Robert L. Travis, general traffic manager, S. D. Warren Co., division of Scott Paper Co., Westbrook, Me.*

● **Carrier cooperation.** "Loss and damage has never been a really major problem in the shipment of our products. With a varied products line, we do have some commodities that are more susceptible to damage than others. But, in any event, when we have recurring L&D problems in any area we take immediate action to get at the underlying cause. Through co-operative effort with the carriers involved, corrective action is instituted at once. Sometimes we find ourselves at fault. At other times it may be the carrier's fault, but we do get them into the act as early as possible to help us find the solution."—*R. H. Heilman, corporate director of transportation and distribution, A. O. Smith Corp., Milwaukee, Wis.*

"(1) We try to have a claims prevention man from the railroad inspect any loadings for destinations where we have had claims for damage. He offers suggestions on how to load the cars and at the same time inspects our loads before departure. (2) Of course, as a last resort, we will request that an impact meter be installed when we have damage on each and every shipment to a certain destination. About a year ago, we were able to determine that cars destined to Ballston Spa, N. Y., were receiving rough handling in Conway, Pa., and at the interchange point between the Penn Central and the Delaware & Hudson. With the co-operation of both railroads, we greatly reduced our damage. (3) The Southern Pacific returned pictures of a car that had damage, and showed us the condition of the contents upon arrival at the destination. From the pictures we had taken and the pictures supplied by the railroad, we were able to discuss loading procedures with our loading crews. We think this is important, because the loading crew gets an idea of what these cars are subjected to. (4) The lack of sufficient equipment in damage-free cars is a major problem. This is really noticed on loads of drums, cases, pails containing grease and oil. We have on numerous occasions bought plywood to use as deckboards in loading these cars. The shipper who does not replace equipment from such a car is guilty of causing damage to the company which loads the car next and cannot adequately brace the load."—*E. A. Parker, assistant traffic manager, Ashland Oil, Inc., Ashland, Ky.*

> "The shipper who does not replace equipment from a DF car is guilty of causing damage to the company which loads the car next"

"In the past two years we have engaged in the following activities for the reduction of loss and damage: (1) Two packaging engineers have been engaged by headquarters traffic to facilitate the flow of information between the packaging engineers and the transportation specialists. (2) We are conducting tests of the transportation environment by instrumenting piggyback and highway trailers. Several engineers, including the corporate vice president of engineering, have ridden in trailers to get first-hand knowledge of conditions to which our freight is subjected. (3) Several of our locations are using impact registers consistently. Routes with satisfactory recordings are used, and those with unsatisfactory recordings are avoided. (4) One of our major plant traffic managers is now reporting to the manager of quality and reliability for his division. (5) We are conducting a continuing campaign with carriers to upgrade and improve equipment. (6) A major division has undertaken the centralization of claim data using computer programs to determine the causes and nature of damage in transit.

"In general, we believe all carriers should undertake vigorous programs for the reduction of loss and damage claims. Two motor carriers we know of have reduced this category of expense by 75%. While AAR reports are not available, American Trucking Associations' 1970 report for 79 carriers shows that less than 6% of the claims paid were for concealed damage. The balance of all causes for claim payments appears to be clearly within carrier control."—*J. D. Murrin, supervisor traffic services, Westinghouse Electric Corp., Pittsburgh.*

● **Frozen food handling.** "In August 1970 my company formed a materials handling committee with representatives from the manufacturing and sales/marketing departments. Specifically, the committee was composed of the following divisions: Quality Assurance, Production Planning and Scheduling, and Physical Distribution. The committee's function initially was to develop a frozen food product handling policy . . . This policy . . . has been distributed to all plants and warehouses handling our products. Compliance is mandatory and periodic inspections are made at all locations handling the products to assure adherence."—*D. J. Osbjornson, director, physical distribution, Lamb-Weston, Inc., Portland, Ore.*

[Mr. Osbjornson submitted excerpts from a printed document setting forth Lamb-Weston's frozen food product

(Continued on page 39)

This new water fill system is why today's GM locomotive is even more reliable.

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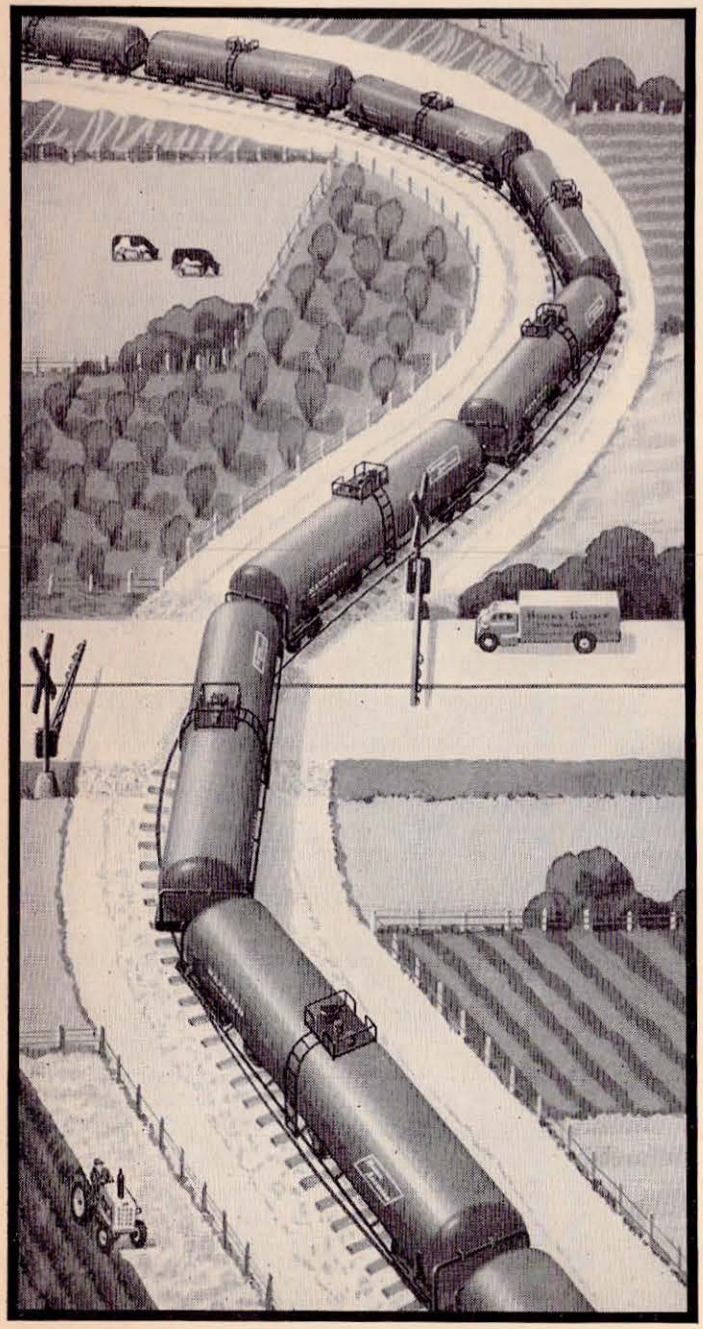
Our new water fill system is just one more example of the things we're doing to make your next GM locomotive even more reliable and easier to maintain.

GM
MARK OF EXCELLENCE

Electro-Motive Division
La Grange, Illinois

POLLUTION SOLUTION: enrich and restore the soil by using organic wastes

Another example of North American Car innovations that turn demanding customers into happy working partners



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SEMCO came to North American Car with a problem. How could they pick up large quantities of fully digested and aged organic fertilizer processed and stored in lagoons by the Metropolitan Sanitary District of Greater Chicago and get it to the farmlands where it was needed?

North American Car came up with customized cars to help SEMCO's scientists and agronomists get this fertilizer to the farmlands where its nutrients will help farmers raise bumper crops. (Tests by universities and others prove this type of fertilizer improves crop production substantially.)

At one location, 3,000 tons of slurry a day are moved through a pipeline to a rail loading site where high-speed pumps transfer it into tank cars. Then it is moved by the trainload to a farm region where it is restored to the soil.

SEMCO's and North American's partnership takes the scientific approach to the completion of the ecological cycle. Chicago is only the beginning. Our partnership can enrich farmlands anywhere by utilizing organic wastes which pose an ever growing problem to every municipality or industry.

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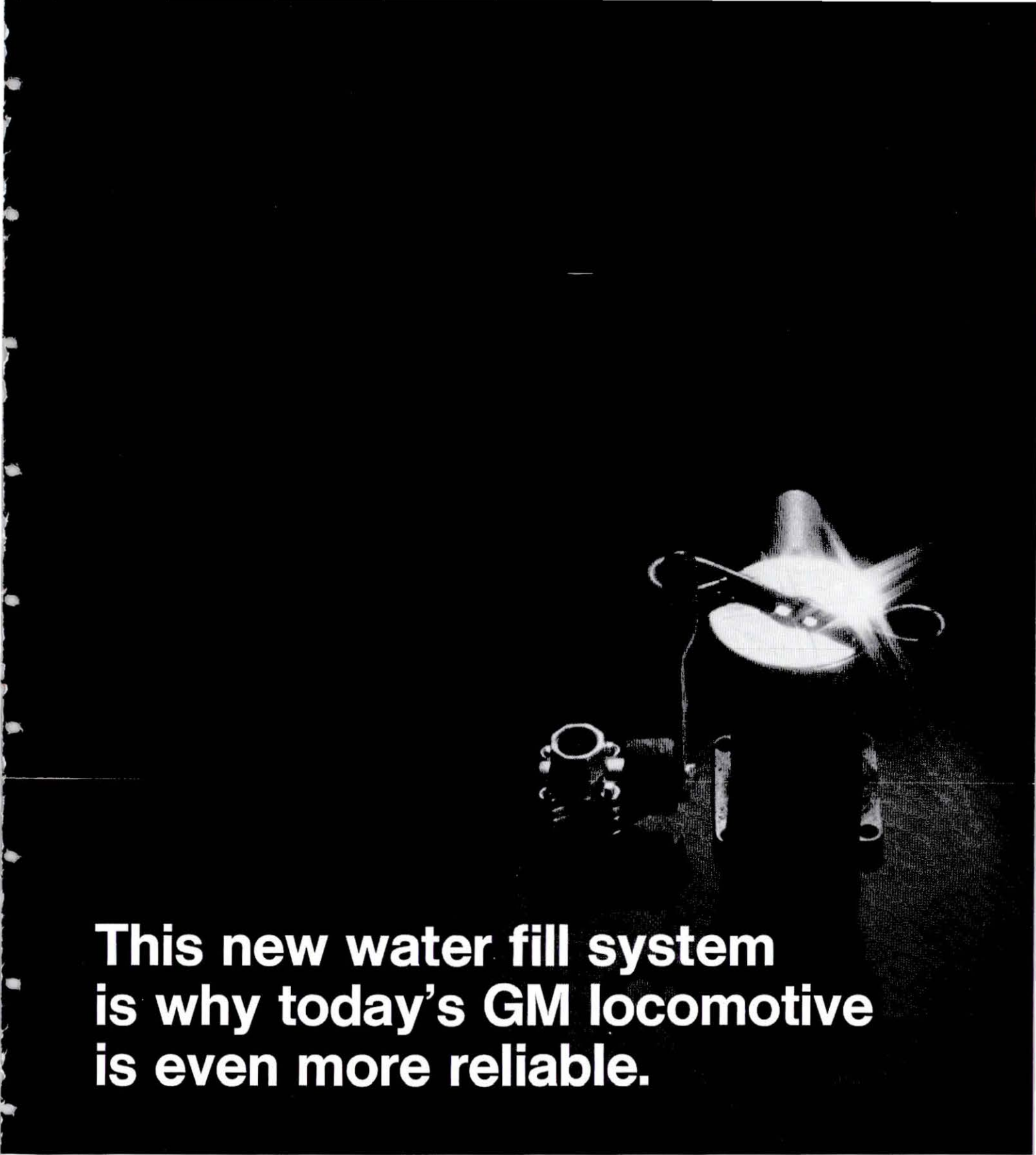

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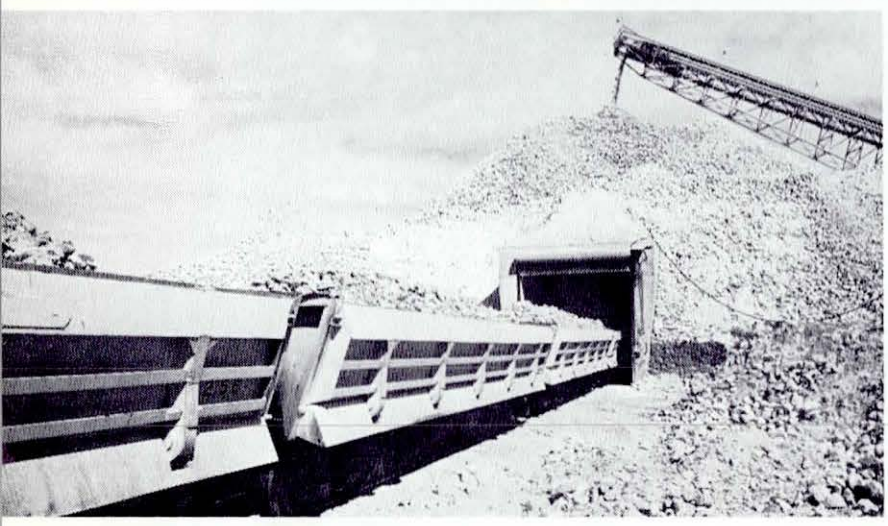
Electro-Motive Division
La Grange, Illinois

NONSTOP HAULING



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Continuous loading, hauling and dumping cycle uses DIFCO Air Dump Cars; pays off for U.S. Steel at Cedarville.

Loading and dumping "on-the-move" is a key element in achieving overall operating efficiency at U.S. Steel's limestone quarry near Cedarville, Michigan.

Loaded from gate-fed overhead facilities, DIFCO Air Dump Cars keep moving all the way through the hauling system, dumping from a trestle into the crushing plant's surge pile located over a tunnel conveyor. DIFCO's smooth and fast 8-second dump cycle has proved effective in the safe, nonstop dumping of the limestone rock up to 8″ in size.

Designed to eliminate all unnecessary dead weight, DIFCO Air Side Dump Cars are built of USS T-1 Steel to stand up under shock-loading and heavy duty hauling.

U.S. Steel relies on DIFCO Cars in their continuing program to increase haulage efficiency at the Cedarville complex. If you feel this kind of modern approach to system-hauling could increase your operation's productivity and profitability, talk with a DIFCO representative. Call, write or wire today.

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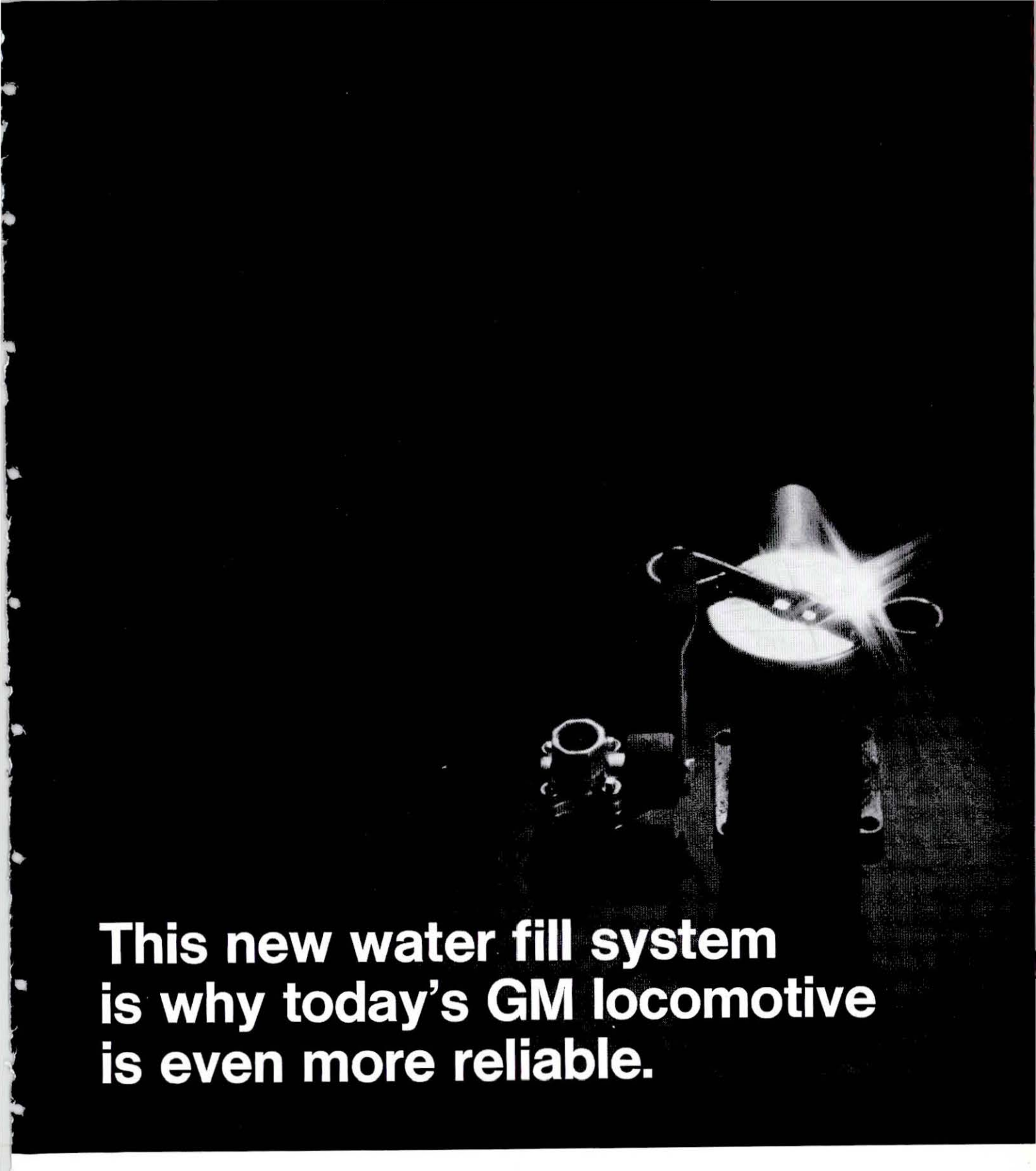

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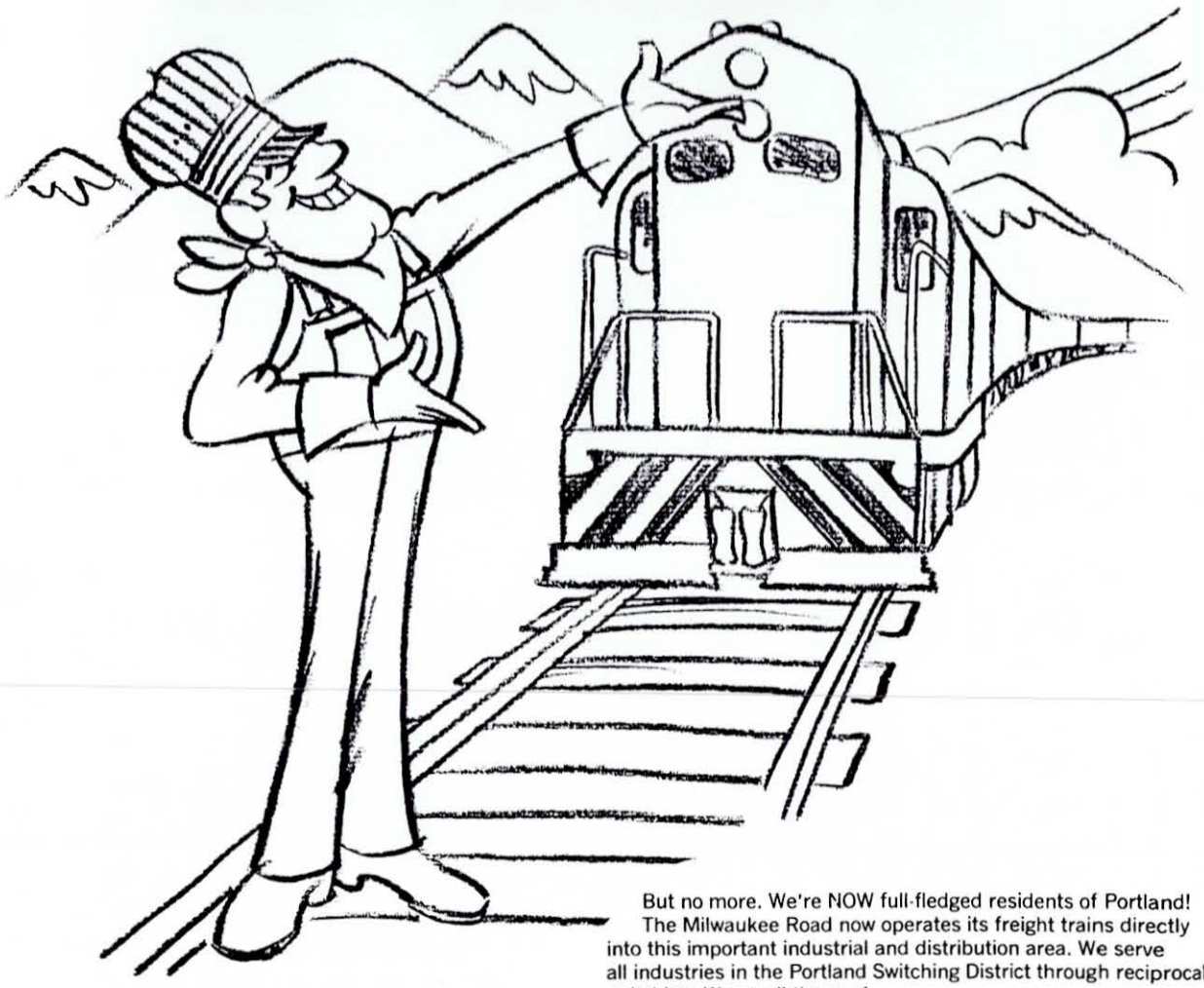
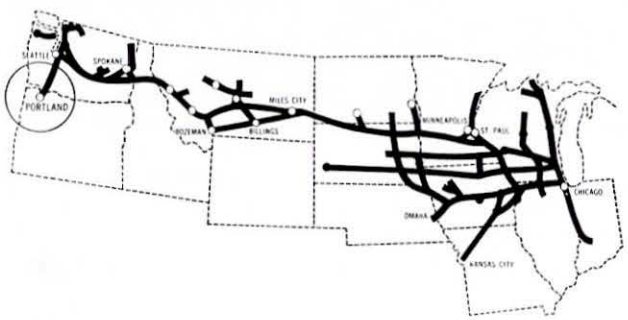
Look us over, Portland. We've moved in!



So near, but yet so far. That's probably what Portland thought about the Milwaukee Road. Just out-of-state neighbors from Longview, Washington, 46 miles away.



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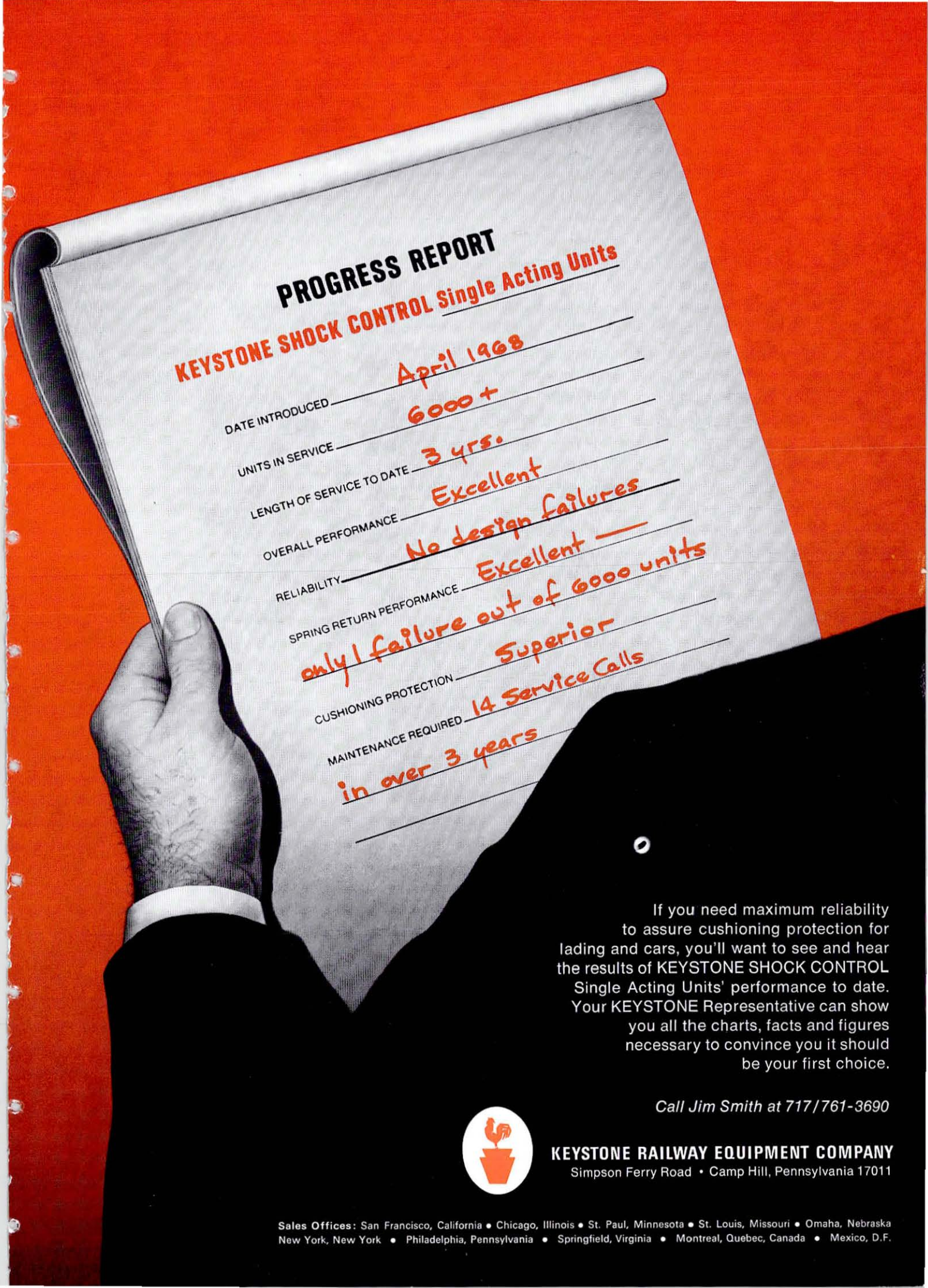
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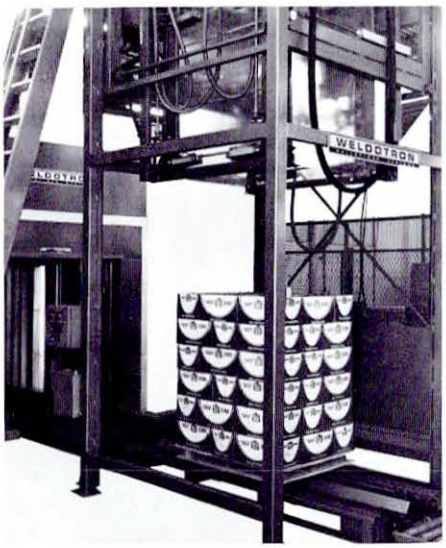
New Products Report



Pallet load bagging (RA-1)

A fully automatic system for forming and placing bags over pallet loads is designated the 4150 series. It is capable of extremely high-speed pallet wrapping over a wide range of pallet sizes to suit almost any application.

The 4150 automatically feeds a length of gussetted tubing, which is sealed and cut to form a bag. The bag is opened from top to bottom while the pallet load is moving into wrapping position. Thus, when the load stops, the fully formed bag is immediately pulled over it without touching the load itself. Speeds up to 120 loads an hour can be reached. *Weldotron Corp.*

Stainless-steel trailer (RA-2)

All of the advantages of the F Model trailer are said to be incorporated in the new stainless-steel Model SF which will be available in dry freight and refrigerated design in a choice of three standard over-all heights: 12½ ft, 13 ft, and 13 ft 4½ in. The SF incorporates spot welded sidewall construction, stainless-steel body posts on 12-in. centers, and extra heavy duty stainless-steel lower rails. Standard Select-A-Point sliding tandem, Pro-Par axles with oil seals, Pro-Par F2 spring suspensions, and Pro-Par 2-speed square leg supports and 1 3/8in. laminated hardwood floors are also included. Extra protection (forward) is provided with a 12-gauge high-strength steel bulkhead, heavy duty steel floor plate and a front crossmember. Full width coupling is provided by a ¼-in. steel pick-up plate. Extra protection (rear) is provided by a 1/2- x 6-in. steel bar bumper, a 5/16-in. steel crossmember, a 12-gauge hot-rolled-steel boxed header over the doors and patented lock flange rear corner posts. Solid plymetal rear doors incorporate cam locks with Anti-Rax hardware. *Fruehauf Corp.*

Hoppercar coating (RA-3)

A new urethane coating material, Neothane NC-52, has been designed especially for hopper cars, salt brine tanks, and other metal items requiring protection against highly abrasive and corrosive materials. Neothane NC-52, replacing NC-2 in the manufacturer's line, offers the same chemical resistance as the older product but costs 25% less.

Application advantages of NC-52 include a single-coat buildup capability of 8 mils instead of 2 1/2 mils without thickener, and 25 mils instead of 12 mils with thickener. NC-52 dries for re-coat purposes in two hours and reaches final cure at room temperature in 65 to 70 hours. It is available in bulk or applied from professional applicators. *Goodyear Tire & Rubber Co.*

Four-wheel drive switcher (RA-4)

The four-wheel drive Mercedes Benz Unimog now working as a switch engine can pull a string of cars weighing as much as 500 tons or be converted to an "off-rail" vehicle for transporting materials, grading roads, and various other uses. Cars are coupled either to the front or rear of the Unimog 406 by

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means of fully automatic couplers operated from the cab.

On-and-off rail operation is accomplished by means of a lift mechanism that raises the front and rear mounted track guiding wheels and fixes them in a position high above the ground. The mechanism is activated by a lever in the cab. Plows, blowers and other snow removal implements can be mounted on the unit without detaching the guide wheels.

The unit, powered by a six-cylinder, 346-cu-in. diesel, becomes an off-road mobile power source when its three power take-offs and hydraulic system outlets are harnessed. It has eight forward and four reverse speeds and can operate at 80 yards per hour to 45 mph without clutching or stopping. Top reverse speed is 18 mph. Gross vehicle weight is 12,130 lb; wheelbase, 93.7 in.; and turning circle 35.4 ft. Standard equipment provided for switching applications includes an additional air compressor, track lights mounted on both sides of the cab, rail sanders for rear wheels, a locomotive type air horn, and a switch-engine bell. *Mercedes-Benz of North America.*

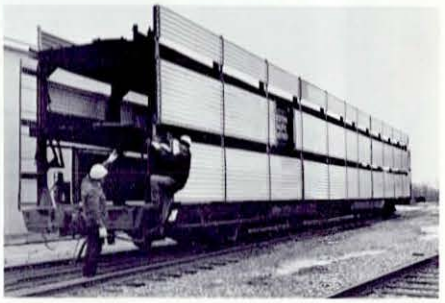
Transfer car (RA-5)

The 200-ton-capacity railroad type flat car for heavy-duty handling jobs between plants is one of four recently shipped to industrial customers. It operates on standard gauge track and can negotiate a 320-deg radius curve. The welded fabricated assembly features hand brake, couplers, draft gear, and roller bearing trucks. Car decks are covered with heavy steel, raised-pattern floor plate and are equipped with stake pockets to hold retaining posts as needed. Smaller- and larger-capacity versions of the cars are available. *Atlas Car & Manufacturing Co.*

Rolling door guard (RA-6)

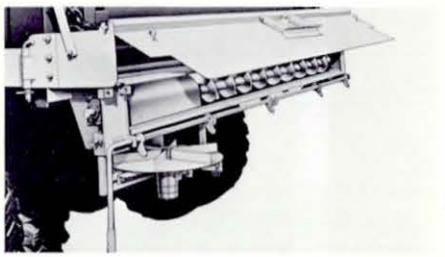
The Saf-T-Gard is a combination compressible weather seal and electrical safety strip mounted along the bottom edge of rolling doors or other types of doors that open upward. It works in conjunction with the door's electrical operator control to stop and reverse the door to the open position if an obstruction is encountered in doorway while the door is closing.

Circuitry in the unit also detects failure of any component part of the safety device or its controls. In the event of damage to, or failure of, the safety device or any of its controls, the door, unless fully closed, will raise to the fully open position and remain open with the closing circuit electrically locked out until the fault and/or damage is corrected. In the meantime, the door can be operated manually. The vivid yellow of the compressible strip adds further safety. *Kinnear Corp.*



Aluminum rack panels (RA-7)

Roll-formed rib aluminum side shielding panels replaced another arrangement on a tri-level auto rack car assigned to Ford Motor Co. The aluminum panels, developed by Evans Products with the engineering assistance of Reynolds Metals, are 32 ft in length, 4 ft in height, and add only 1,100 lb to the 89-ft car, said to be the first in auto hauling service to get aluminum side protection. *Reynolds Metals Co.*



Tailgate spreader (RA-8)

A newly designed, all-purpose precision hydraulic tailgate spreader includes a self-cleaning hopper. This new Selecto-Spreader (Model S-330) has a one-piece completely removable combination cover and rear wall. The wall serves as the entire back wall of the hopper and swings out to provide easy removal of foreign objects and self-cleaning. When used in the cover position, it permits dumping over or under the tailgate without letting material enter the hopper. Model S-330 is available for mounting on a wide range of end dump bodies. Precise, truck cab control and one-man operation make it adaptable for all spreading applications. *Central Engineering Co.*

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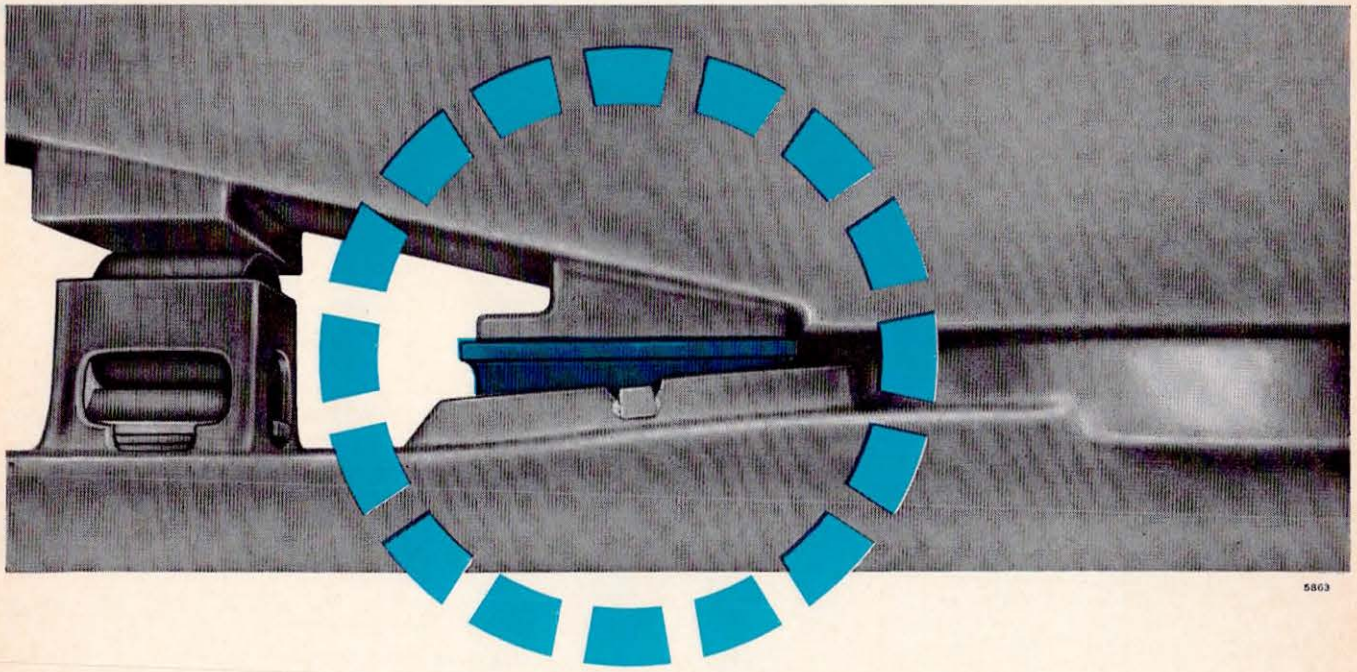

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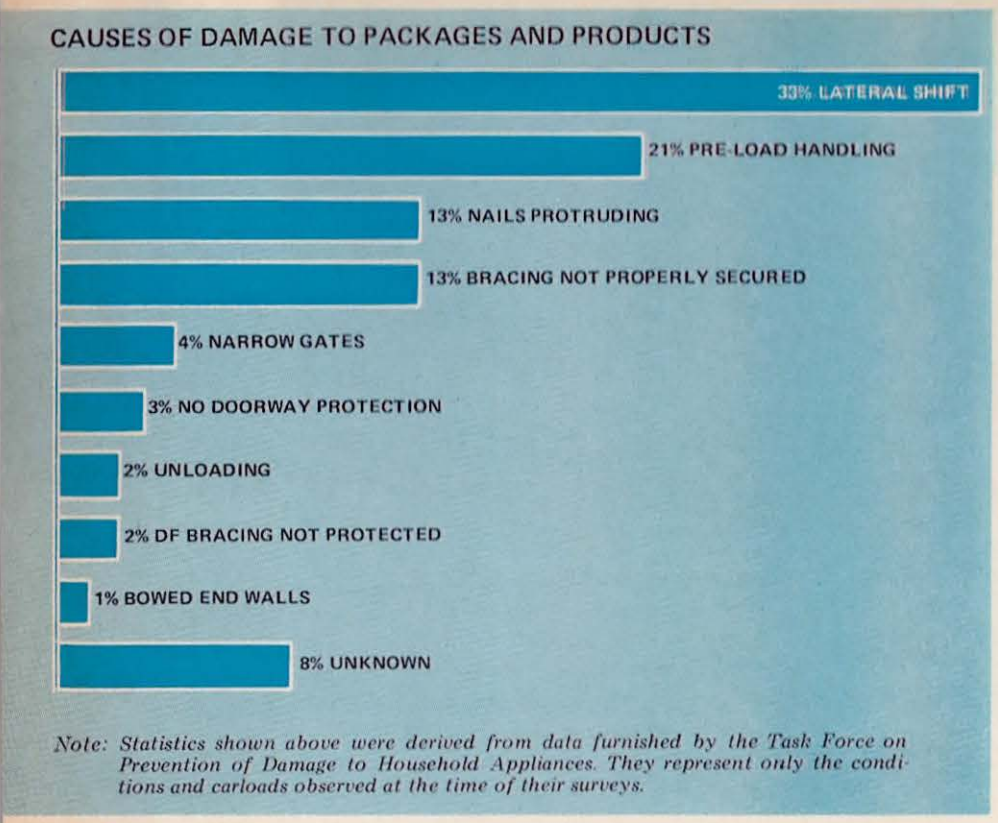

Note: Statistics shown above were derived from data furnished by the Task Force on Prevention of Damage to Household Appliances. They represent only the conditions and carloads observed at the time of their surveys.

Appliance L&D: A new look at a $6.3-million problem

Damage prevention is the aim of a months-long program, now entering a new phase, on the handling of household appliances.

Actually, loss-and-damage payout on appliances was one of the relatively few areas in which there was an improvement last year—a reduction in payment of more than 27% from 1969 figures. But the dollar drain still totaled more than $6.3 million.

Thus far, the program on damage prevention has produced a task-force survey, and new prevention and inspection manuals. Now, a national educational program is getting under way—a program in which prevention specialists will be teaching the teachers, who will then handle field instruction in safe handling of appliances.

It all started with a three-part survey by a team assigned by the AAR National Loss and Damage Prevention Committee, working through a special committee on prevention of damage to appliances. First, the task force looked at operations at a manufacturing plant and at warehouses. Then it made detailed studies of carload shipments, selected origins to selected destinations. Origin and destination photos were taken; more than 50% of the cars were also equipped with impact registers.

Finally, the team called on major appliance manufacturers to check on variations from patterns established in the study's first two parts.

● **What causes damage?** Not surprisingly, the survey summary called attention to the condition of rail equipment, to rough car-handling and to lack of proper inspection and communication. It also noted five other "outstanding features which ultimately cause, aggravate or create damage during distribution—loading damaged appliances into cars, appliance-handling equipment, protruding nails in cars, improper application of bracing and unfilled crosswise voids."

Also not surprisingly, the study team found problems cropping up at the very start of the distribution cycle—with the occasional allowing of a defective appliance to go through inspection, be packaged and loaded. Over-all, the summary called for better quality control in all handling preceding loading—and it cited a need for better maintenance of handling equipment, tighter control on package damage and improved supervision on the loading dock.

● **Errors in loading.** In the actual loading operation, the team reported, "in many cases there was poor row alignment, no dividers between stacks of different-size units, no dividers between layers and no space fillers or guide rails to take up the lateral void . . . Some cars were loosely loaded and DF equipment was not properly secured. On floating loads, there were no guide rails along the sides. Wood gates which were temporarily nailed to end walls caused package and product damage. There were no trusses on floating load gates, and the straps were tensioned too tightly, causing compression of the corner packages. Some of the gates were too narrow. There were many cars without swingboard, deckboards or gates between caps and DF bars; or, when this equipment was present, it was improperly positioned or locked."

For the most part, the survey showed, "DF-type box cars were in better condition than ordinary XM box cars. However, there was often a shortage of interior equipment in the DF-type cars—or the equipment was in such condition that it could not be used.

"Many gates were broken, and DF-type crossmembers were often bent or broken. At several locations, there was an over-supply of both good and damaged DF swingboards and bars that would not fit any of the cars in the assigned service."

● **Shipper/receiver responsibilities.** The study team emphasized that "shippers and receivers of assigned-service cars must make certain that any of these cars having interior defects are reported bad-order—with sufficient information to enable the origin railroad to readily locate and repair the defect before the car is placed for another load."

● **The villian: Lateral shift.** In the study of specific carload movements, four causes of damage stood out. One-third of the incidents of damage to packages and products were caused by lateral shifting: more than 20% could be laid to pre-load handling; protruding nails and improperly-secured bracing each accounted for 13% of the damage incidents.

With the survey completed, prevention personnel moved into preparation of the inspection manual (identifying probable cause by the type of damage sustained) and the prevention manual (outlining ways and means of handling, all the way through the distribution cycle, to keep the various kinds of damage from happening). ■

How shippers tackle L&D

(Continued from page 30)

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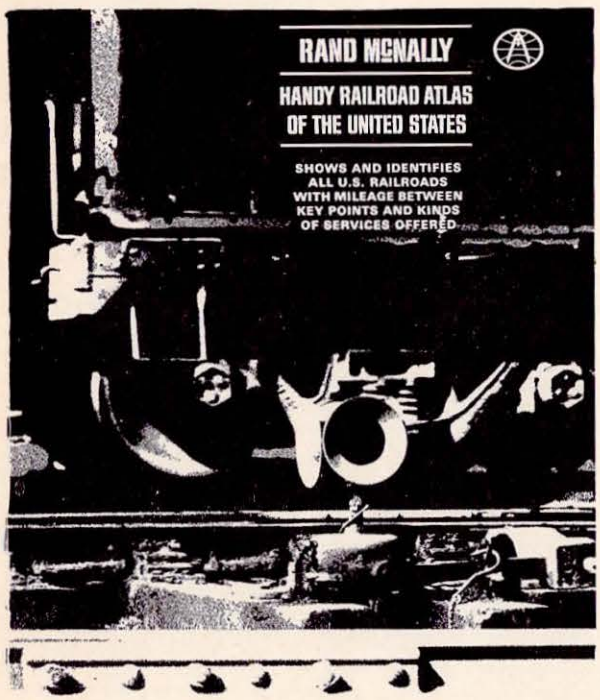

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COLORADO & WYOMING.—**George Simony,** general superintendent, elected to the additional position of vice president. **Gerald G. Quenzer,** controller, elected to the additional post of treasurer. **John Burnett,** superintendent, Middle Division, appointed also assistant treasurer.

DEPARTMENT OF TRANSPORTATION.—**William S. Heffelfinger** has been appointed Assistant Secretary of Transportation for Administration, Washington. He had been Deputy Assistant Secretary of Administration.

John W. Barnum has been nominated general counsel, Washington, succeeding **James A. Washington, Jr.,** recently appointed Judge of the Court of General Sessions in the District of Columbia. Mr. Barnum is a partner in the New York law firm of Cravath, Swaine & Moore.

ERIE LACKAWANNA—**D. F. Mackerley** named manager of industrial development, Hoboken, N. J., succeeding the late **G. W. Moorhouse. F. J. Hogan,** industrial agent, Hoboken, promoted to district manager, Industrial Development Department, to replace Mr. Mackerley. **A. M. Giel, Jr.,** who joined the EL Research Department at Cleveland in Sept. 1970, succeeds Mr. Hogan at Hoboken.

Kenneth E. Pritchard, assistant vice president, has assumed jurisdiction of the Central District, Sales and Service Department, Cleveland.

W. Seal Burwell has assumed the duties of freight traffic manager, Central District, Cleveland.

FORT WORTH & DENVER.—**W. L. Kirkpatrick** elected secretary and treasurer, Fort Worth, Tex., to succeed **J. R. Barnhill,** who retired after more than 47 years' service.

W. R. Bjorklund named chief engineer, Fort Worth.

ILLINOIS CENTRAL.—**U. J. Burvant,** regional sales manager, New Orleans, named assistant to vice president there. **Narvell Strickland,** manager labor relations, succeeds Mr. Burvant.

Alan R. Lind, assistant editor, **Illinois Central Magazine,** appointed editor, succeeding **Charles F. Burrows,** on disability leave.

Forrest F. Lipe, manager eastern sales, appointed to the newly created position of national accounts manager, New York. **Hugh R. Arnold,** president of Dieckbrader Express, Inc., Cincinnati, Ohio, has joined the IC as manager eastern sales at New York, succeeding Mr. Lipe.

ILLINOIS TERMINAL.—**L. R. Salem** named manager—transportation services, St. Louis.

LONG ISLAND.—**William C. Gage,** manager of equipment maintenance, Jamaica, N. Y., appointed superintendent—maintenance of equipment. **T. E. Hall,** superintendent shops, Morris Park Shops, Richmond Hill, N. Y., named master mechanic there. **D. J. Saporito** appointed master mechanic, M. U. car operation and terminals, including Dunton and Brooklyn Electric Car Shops.

MISSOURI PACIFIC-TEXAS & PACIFIC.—**Harold E. Hartsfield** named coordinator—truck–rail rates, St. Louis. **C. B. Burns,** general agent, Tulsa, Okla., appointed traffic analyst, St. Louis.

K. M. Holloway, trainmaster, Palestine, Tex., appointed superintendent, Kingsville division, Corpus Christi, Tex. **J. R. White,** trainmaster, Donaldsonville, La., succeeds Mr. Holloway, and in turn is succeeded by **K. G. Rose,** transferred from San Antonio, Tex. Mr. Rose's successor is **H. P. McGehee,** assistant trainmaster, Freeport, Tex. **C. A. Peters,** trainmaster, **MP,** Houston, named assistant superintendent, **TP-MP Terminal Railroad of New Orleans** and **New Orleans & Lower Coast,** New Orleans.

MONON.—**Edward Volenec,** acting treasurer, elected treasurer.

NATIONAL PERISHABLE FREIGHT COMMITTEE.—**Harry R. Brandl** appointed chairman at Chicago, succeeding the late **James D. Sutherland. Donald R. Banks** succeeds Mr. Brandl as assistant to chairman.

NORFOLK & WESTERN.—**William E. Ruby,** superintendent, Lake Erie Division, Bellevue, Ohio, appointed manager transportation, Lake Region, Cleveland. **Joseph P. Watters,** assistant superintendent, Pittsburgh Division, Brewster, Ohio, succeeds Mr. Ruby. **Edward J. McKean, Jr.,** trainmaster, Fostoria, Ohio, named assistant manager transportation, Lake Region, Cleveland, succeeding **Albert L. McCune,**

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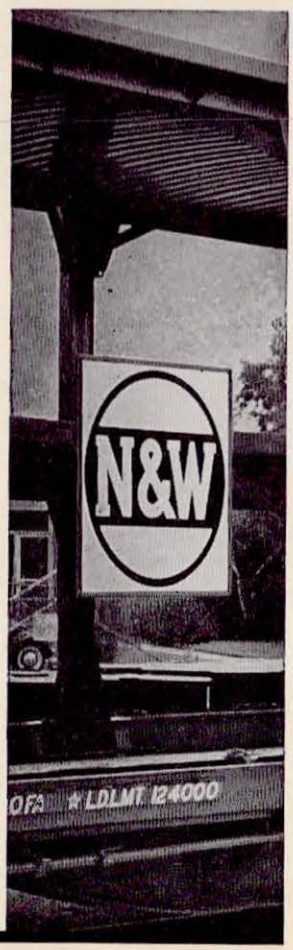

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- ☐ Passenger Car, Air conditioned, chair (18x35 inches)

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How shippers tackle L&D

(Continued from page 30)

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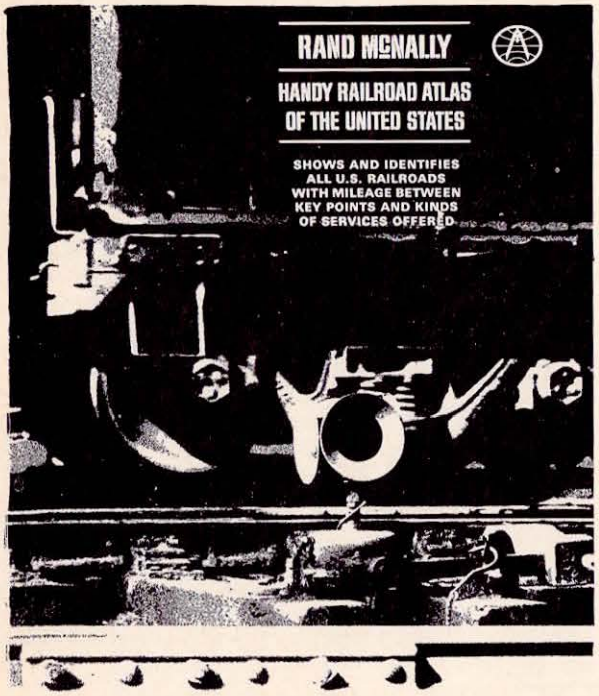

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People

BESSEMER & LAKE ERIE.—**Robert F. Joyce,** assistant manager—coal and ore pricing, Pittsburgh, appointed manager of pricing, succeeding **Preston H. Taylor,** who retired April 30, after a railroad career spanning 44 years, the last 22 with the B&LE. **Joseph J. Surina,** assistant manager—merchandise pricing, appointed assistant manager of pricing—coal and ore. **Guy A. Rea,** supervisor of pricing, appointed assistant manager—pricing service.

BURLINGTON NORTHERN.—In the newly-established market development division of the marketing department, the following named assistant vice presidents, market development: **W. C. Hageman**-forest products; **T. C. Kryser**—energy, ores and metals; **G. F. Reynolds**-food and agricultural products; **M. J. Barron**-manufactured products; **A. E. Michon**-grain. **K. C. Sanders** named assistant vice president, marketing services. In the marketing department's pricing division, **C. J. Hockaday,** assistant vice president, special services, assumes the responsibilities of assistant vice president, pricing. Mr. Hockaday's successor is **M. H. Karl,** director, special projects. Also in the marketing department **John K. Cutforth,** assistant vice president and regional sales manager, Portland, Ore., named assistant vice president-sales (west), St. Paul. **Thomas C. Rowley,** director, specialized sales, St. Paul, succeeds Mr. Cutforth. Named assistant vice presidents and regional sales managers are **J. R. Grimes,** Chicago; **W. L. Malone,** Seattle; **L. S. Kiser,** Omaha.

F. D. Larson named director, operations administration, St. Paul, succeeding **W. R. Bjorklund,** appointed chief engineer, **Fort Worth & Denver.**

CANADIAN NATIONAL.—**R. L. Gray,** regional engineer, Toronto, appointed assistant chief engineer—maintenance—system, Montreal, succeeding **R. G. Maughan,** transferred.

R. J. Payne, assistant general superintendent equipment, St. Lawrence Region, Montreal, promoted to general superintendent equipment, Great Lakes Region, Toronto, succeeding **J. J. Harris,** who has gone with the **Canadian Grain Commission.**

P. K. Ausborn, assistant superintendent, Melville, Sask., promoted to superintendent at The Pas, Man.

George Lach, assistant vice president—personnel, promoted to vice president—personnel and labor relations, Montreal, succeeding **W. T. Wilson,** retiring.

John P. Schiller appointed manager, Newfoundland ferry and coastal services, St. John's, Nfld.

J. R. Rivest, regional supervisor car control, appointed coordinator car management, St. Lawrence Region, Montreal, and his former position abolished.

W. L. Draper, superintendent equipment, Toronto Area, promoted to assistant general superintendent equipment, Great Lakes Region, Toronto. **H. M. Whitcombe** succeeds Mr. Draper and his former position of mechanical officer—car, Great Lakes Region, has been abolished.

Navigate overseas freight to the port on time...via the good shipper Frisco

Frisco expedites your exports with fast, dependable shipping to world ports. Mobile and Pensacola are on our line, or ship via Frisco and connecting lines to other overseas terminals. We add dependability to delivery with services like Advance Trains and a Management Information Control System . . . all designed for "bon voyage" freight delivery.

St. Louis - San Francisco Ry. Co., General Offices 906 Olive St., St. Louis, Mo. 63101.

We're a *going* railroad.

FRISCO

COLORADO & WYOMING.—**George Simony,** general superintendent, elected to the additional position of vice president. **Gerald G. Quenzer,** controller, elected to the additional post of treasurer. **John Burnett,** superintendent, Middle Division, appointed also assistant treasurer.

DEPARTMENT OF TRANSPORTATION.—**William S. Heffelfinger** has been appointed Assistant Secretary of Transportation for Administration, Washington. He had been Deputy Assistant Secretary of Administration.

John W. Barnum has been nominated general counsel, Washington, succeeding **James A. Washington, Jr.,** recently appointed Judge of the Court of General Sessions in the District of Columbia. Mr. Barnum is a partner in the New York law firm of Cravath, Swaine & Moore.

ERIE LACKAWANNA.—**D. F. Mackerley** named manager of industrial development, Hoboken, N. J., succeeding the late **G. W. Moorhouse. F. J. Hogan,** industrial agent, Hoboken, promoted to district manager, Industrial Development Department, to replace Mr. Mackerley. **A. M. Giel, Jr.,** who joined the EL Research Department at Cleveland in Sept. 1970, succeeds Mr. Hogan at Hoboken.

Kenneth E. Pritchard, assistant vice president, has assumed jurisdiction of the Central District, Sales and Service Department, Cleveland.

W. Seal Burwell has assumed the duties of freight traffic manager, Central District, Cleveland.

FORT WORTH & DENVER.—**W. L. Kirkpatrick** elected secretary and treasurer, Fort Worth, Tex., to succeed **J. R. Barnhill,** who retired after more than 47 years' service.

W. R. Bjorklund named chief engineer, Fort Worth.

ILLINOIS CENTRAL.—**U. J. Burvant,** regional sales manager, New Orleans, named assistant to vice president there. **Narvell Strickland,** manager labor relations, succeeds Mr. Burvant.

Alan R. Lind, assistant editor, **Illinois Central Magazine,** appointed editor, succeeding **Charles F. Burrows,** on disability leave.

Forrest F. Lipe, manager eastern sales, appointed to the newly created position of national accounts manager, New York. **Hugh R. Arnold,** president of Dieckbrader Express, Inc., Cincinnati, Ohio, has joined the IC as manager eastern sales at New York, succeeding Mr. Lipe.

ILLINOIS TERMINAL.—**L. R. Salem** named manager—transportation services, St. Louis.

LONG ISLAND.—**William C. Gage,** manager of equipment maintenance, Jamaica, N. Y., appointed superintendent—maintenance of equipment. **T. E. Hall,** superintendent shops, Morris Park Shops, Richmond Hill, N. Y., named master mechanic there. **D. J. Saporito** appointed master mechanic, M. U. car operation and terminals, including Dunton and Brooklyn Electric Car Shops.

MISSOURI PACIFIC-TEXAS & PACIFIC.—**Harold E. Hartsfield** named coordinator—truck–rail rates, St. Louis. **C. B. Burns,** general agent, Tulsa, Okla., appointed traffic analyst, St. Louis.

K. M. Holloway, trainmaster, Palestine, Tex., appointed superintendent, Kingsville division, Corpus Christi, Tex. **J. R. White,** trainmaster, Donaldsonville, La., succeeds Mr. Holloway, and in turn is succeeded by **K. G. Rose,** transferred from San Antonio, Tex. Mr. Rose's successor is **H. P. McGehee,** assistant trainmaster, Freeport, Tex. **C. A. Peters,** trainmaster, **MP,** Houston, named assistant superintendent, **TP-MP Terminal Railroad of New Orleans** and **New Orleans & Lower Coast,** New Orleans.

MONON.—**Edward Volenec,** acting treasurer, elected treasurer.

NATIONAL PERISHABLE FREIGHT COMMITTEE.—**Harry R. Brandl** appointed chairman at Chicago, succeeding the late **James D. Sutherland. Donald R. Banks** succeeds Mr. Brandl as assistant to chairman.

NORFOLK & WESTERN.—**William E. Ruby,** superintendent, Lake Erie Division, Bellevue, Ohio, appointed manager transportation, Lake Region, Cleveland. **Joseph P. Watters,** assistant superintendent, Pittsburgh Division, Brewster, Ohio, succeeds Mr. Ruby. **Edward J. McKean, Jr.,** trainmaster, Fostoria, Ohio, named assistant manager transportation, Lake Region, Cleveland, succeeding **Albert L. McCune,**

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Lasting Image!

Lasting, because your message is embedded in a high-strength, sign material called Empro. It is made of fiber glass reinforced, polyester resin, and resists the rigorous treatment encountered by transportation markings.

Your message becomes an integral part of the Empro panel!

WRITE FOR BULLETIN E667

kemlite

KEMLITE CORPORATION
P. O. Box 429, Joliet, Illinois 60434

Circle 19 on coupon page 35

Freight and Passenger Car Charts—$2 each

These charts are very helpful to AAR billing clerks, mechanical engineers, purchasing and stores personnel, car inspectors, write-up men, car foremen, and anyone else who needs a knowledge of car parts and their relation to each other.

The charts include a cutaway diagram of the car and a listing of important parts with arrows showing where the part is located. These charts are used in our apprentice technical training program for the carman craft.

If you are not satisfied **YOUR MONEY WILL BE REFUNDED** *if you return the charts to us within 30 days*

THE RAILWAY EDUCATIONAL BUREAU
1809 CAPITOL AVENUE
OMAHA, NEBRASKA 68102

Please send the charts I have checked below. If I am not satisfied I will return the charts within 30 days for a full refund. I enclose a check or money order for $2.00 for each chart.

- ☐ Gondola Car, Modern design (23x27 inches)
- ☐ Mechanical Refrigerator Car, Modern design (18x22 inches)
- ☐ Box Car, AAR Standard 40 ft. (23-29 inches)
- ☐ Covered Hopper Car (22x30 inches)
- ☐ Tank Car. I.C.C. 103-W. (23x35 inches)
- ☐ Passenger Car, Light-weight, streamlined (23x35 inches)
- ☐ Passenger Car, Air conditioned, chair (18x35 inches)

Name .....
Address .....
City ..... State .....
Job ..... RR .....

who replaces Mr. Watters. **Donald K. DeCamp,** assistant trainmaster, Narrows, Va., succeeds Mr. McKean.

Wayne C. Bowman, assistant manager employee benefits, appointed manager employee benefits, succeeding **Lloyd W. Powers,** who retires July 1, after 46 years of service. **Francis D. Scott** named assistant manager employee benefits.

David R. Goode, general tax attorney, Roanoke, appointed director–taxation.

Jean E. Lyon, assistant general manager terminals–system, appointed assistant general manager, Western Region, St. Louis, succeeding **C. W. Dod, Jr.,** appointed assistant general manager transportation–System Operations Center, Roanoke. **C. W. Haynes,** superintendent, Bellevue, Ohio, Terminal, appointed superintendent, Decatur Division, Decatur, Ill., succeeding **Paul E. Stitt,** now director transportation, System Operations Center. **Eugene E. Nicewonder,** superintendent, Buffalo, N.Y., Terminal, transferred to the Cleveland Terminal, succeeding **Gerald E. Bruce,** who replaces Mr. Haynes at Bellevue. **William F. Campbell,** assistant trainmaster, Decatur, promoted to trainmaster, St. Louis Terminal, succeeding **Donald L. McBride,** promoted to assistant superintendent, Chicago Terminal. Mr. McBride succeeds **Thomas I. DeBusk,** now assistant director transportation, System Operations Center.

ROCK ISLAND.—John E. Davis appointed assistant general attorney, Chicago.

ST. LOUIS SOUTHWESTERN.—Dave H. Wallace, general agent, Pittsburgh, retired April 30, after 44 years of service.

SOUTHERN.—Aubrey M. Cary, assistant chief mechanical officer–maintenance, appointed assistant vice president–maintenance of way and structures, with headquarters remaining at Atlanta, Ga.

Jack E. Walters, assistant director of the budget staff, promoted to director-budget staff, remaining in Washington.

SOUTHERN PACIFIC.—Herbert D. Fifield, manager of the contract department, San Francisco, retired April 30 after 45 years' service.

TRAILER TRAIN.—John K. Kidd appointed manager of administration, Philadelphia, reporting to **C. D. Buford,** president. **Russell M. Steel,** systems analyst, Data Processing Department, promoted to manager, systems & programming.

UNION PACIFIC.—Richard T. Corson, assistant freight traffic manager (rates), Los Angeles, named assistant traffic manager there, succeeding **Elvin C. Rasmussen,** retired. **Jeff J. Cranham,** rate analyst, advanced to general freight agent (rates).

WESTERN PACIFIC.—Edward C. Lipman named controller, San Francisco.

D. J. Kerper, assistant manager, purchases and material, appointed manager, purchases and material. **F. P. Brogden,** assistant manager, material, named materials manager.

SUPPLY TRADE

John E. Shiffler, assistant manager of railway sales, Transportation Fuels Department, **Ashland Petroleum Co.,** Ashland, Ky., has been named manager of lubricants and specialties sales in that department. **Robert B. Kiefer** has been named a special representative, Transportation Fuels Department.

Portec Inc., Oak Brook, Ill., has named the **Rockwell Group,** Chicago, as the advertising agency for its Railway Products Division, effective July 1.

C. E. Stipancic, manager–railway markets, Signal & Communications Division of **WABCO,** has been appointed manager of train control and signaling markets, Pittsburgh. **Robert M. Karow,** manager–market planning and development, has been promoted to manager of terminal markets. **John W. Hansen,** manager of marketing communications, has been appointed manager of marketing services. **E. C. Dwyer** promoted to senior consultant. All four report to **C. F. Wert,** manager–marketing.

Jack D. Burden has been appointed regional manager, Atlanta (Ga.) Area Office of **Interpool, Ltd. George F. Moreth** has been appointed regional manager, Chicago Area Office.

Robert T. Barbour has been elected a vice president of **C.I.T. Corp.** and its affiliate **C.I.T. Leasing Corp.** Mr. Barbour

(Continued on page 50)

RAIL—WATER—EXPORT AND DOMESTIC SHIPPERS OF...

REPUBLIC CARBON PRODUCTS CO., INC. QUALITY Republic PRODUCTS CHICAGO

MEMBER RPI RAILWAY PROGRESS INSTITUTE

- PETROLEUM COKE—GREEN
- PETROLEUM COKE—CALCINED
- BY-PRODUCT COKE
- ANTHRACITE
- DIESEL FUEL—LUBE OILS
- METALLURGICAL COAL

MARKETERS OF

CARBON FOR THE METALLURICAL INDUSTRY

FUEL FOR SPECIAL USES AND GENERAL INDUSTRY

Republic Carbon Products Co., Inc.

8 SOUTH MICHIGAN AVENUE • CHICAGO, ILLINOIS 60603

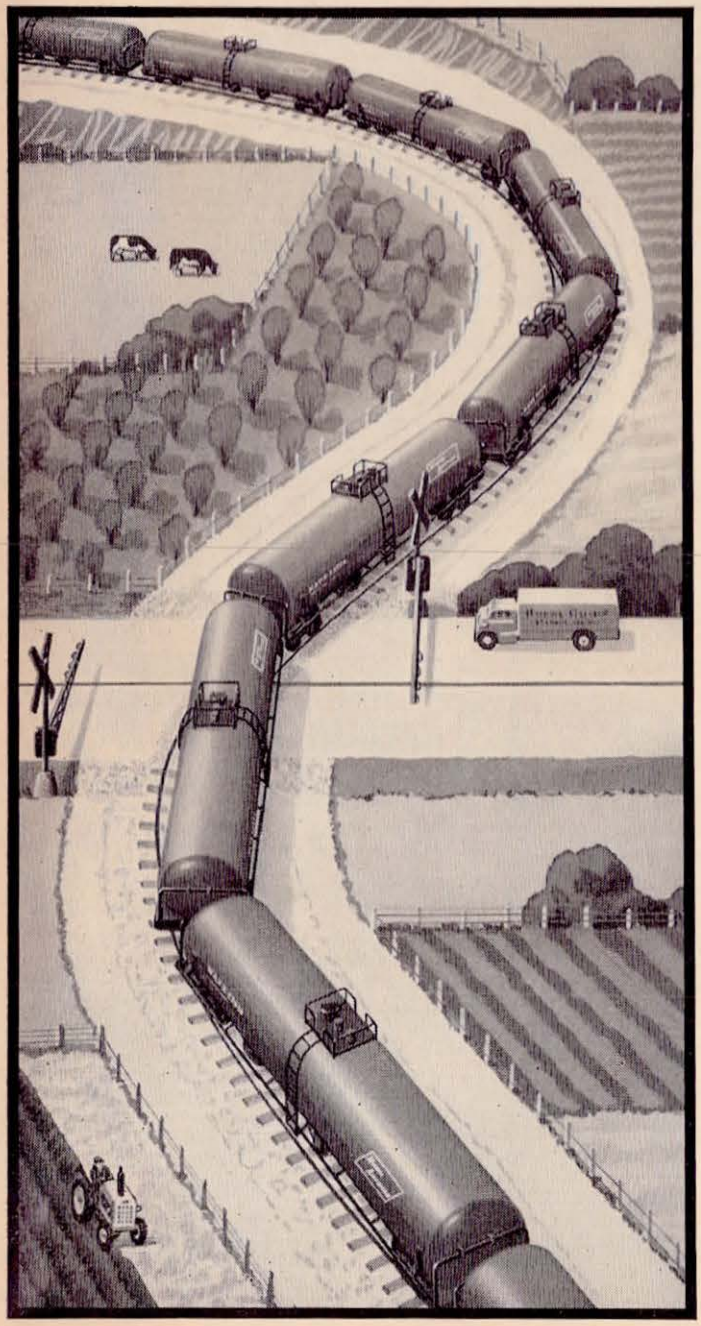
(312) 332-3020

SUBSIDIARY OF AMAX AMERICAN METAL CLIMAX, INC.

Circle 20 on coupon page 35

POLLUTION SOLUTION: enrich and restore the soil by using organic wastes

Another example of North American Car innovations that turn demanding customers into happy working partners



SEMCO (Soil Enrichment Materials Corporation) is a new company working in the field of environmental improvement. It specializes in utilizing organic wastes to enrich and restore soil without risking impairment of water quality or soil productivity.

SEMCO came to North American Car with a problem. How could they pick up large quantities of fully digested and aged organic fertilizer processed and stored in lagoons by the Metropolitan Sanitary District of Greater Chicago and get it to the farmlands where it was needed?

North American Car came up with customized cars to help SEMCO's scientists and agronomists get this fertilizer to the farmlands where its nutrients will help farmers raise bumper crops. (Tests by universities and others prove this type of fertilizer improves crop production substantially.)

At one location, 3,000 tons of slurry a day are moved through a pipeline to a rail loading site where high-speed pumps transfer it into tank cars. Then it is moved by the trainload to a farm region where it is restored to the soil.

SEMCO's and North American's partnership takes the scientific approach to the completion of the ecological cycle. Chicago is only the beginning. Our partnership can enrich farmlands anywhere by utilizing organic wastes which pose an ever growing problem to every municipality or industry.

It's a big job, and it can only be done effectively *by the trainload.*

North American Car Corporation, 77 South Wacker Drive, Chicago, Illinois 60606. (312) 346-0400.

MEMBER RPI RAILWAY PROGRESS INSTITUTE

NORTH AMERICAN

COME TO NORTH AMERICAN . . . FOR CARS THAT SOLVE YOUR PROBLEMS

Circle 21 on coupon page 35

Market Outlook

CARLOADINGS

Loadings of revenue freight in the week ended June 12 totaled 553,552 cars, according to the Association of American Railroads. This was in increase of 58,437 cars, or 11.8%, compared with the previous week, and a decrease of 15,099 cars, or 2.7%, compared with the corresponding week last year. Ton-miles generated by carloadings in the week ended June 12 are estimated at 15.7 billion, an increase of 0.3% above the corresponding week of 1970.

REVENUE FREIGHT CARLOADINGS

Commodity	June 12 Week	June 5 Week
Grain	23,924	18,117
Farm products	12,213	10,525
Metallic ores	53,883	51,570
Coal	109,449	96,465
Crushed stone, gravel & sand	33,660	29,620
Nonmetallic minerals	10,753	9,513
Grain mill products	18,489	15,828
Food & kindred products	24,315	21,505
Primary forest products	24,342	22,924
Lumber & wood products (except furniture)	16,389	13,747
Pulp, paper & allied products	23,536	21,275
Chemicals & allied products	25,426	23,681
Petroleum products	9,572	8,209
Stone, clay & glass products	21,288	19,023
Coke	7,753	8,570
Metals & products	27,814	27,841
Motor vehicles & equipment	25,334	22,559
Waste & scrap materials	15,068	13,563
Forwarder & shipper assn. traffic	5,733	4,978
All other carloads	64,053	56,780
LCL traffic	558	450
Total cars loaded	553,552	496,743

CUMULATIVE TOTAL, 24 weeks	1971	1970	1969
	12,070,989	12,500,352	12,733,914
Estimated revenue ton-miles (billions) 24 weeks	349.2	352.7	350.3

PIGGYBACK CARLOADINGS

U.S. piggyback loadings for the holiday week ended June 5 totaled 20,444 cars (20% below the corresponding week last year) and 32,324 trailers or containers (down 21.8% from 1970). Cumulative volume for the first 23 weeks of 1971 is 516,062 cars (off 6.6% from last year) and 833,149 trailers or containers (down 6.3% from 1970). In addition to freight, 2,532 cars carrying 3,933 trailers or containers of mail and express traffic were handled piggyback. Cumulative figures for the first 23 weeks of 1971 are 74,921 cars (down 4.3% from the 1970 total), and 111,120 trailers or containers (down 10.3% from 1970).

IN CANADA

10 days ending	Tons of Revenue Freight	Cumulative Totals
May 31, 1971	5,746,221	79,808,216
May 31, 1970	5,992,879	79,931,216

NEW FACILITIES

● *Long Island.*—Will spend $11.6 million for 50 miles of track improvements from Harold Tower to Mineola, Huntington to Northport, and Hicksville to Pinelawn, to permit operation of trains at speeds up to 100 mph. Financing is covered by a grant of $7,709,887 from the U.S. Department of Transportation, plus local contributions of $3.8 million.

● *Southern.*—Service on the line through the Chattanooga, Tenn., area will be improved by adding a second line of track over the Tennessee River Bridge. The first of 12 steel spans to support the new track was installed last month. The new track, scheduled for operation by the end of June, will cost over $1 million.

FREIGHT-TRAIN CARS

● *Bad order is unchanged.*—Class I roads on May 1, 1971 owned 1,431,496 freight cars, 3,145 fewer than on May 1, 1970, according to AAR report summarized below. Bad order ratio was the same as last year.

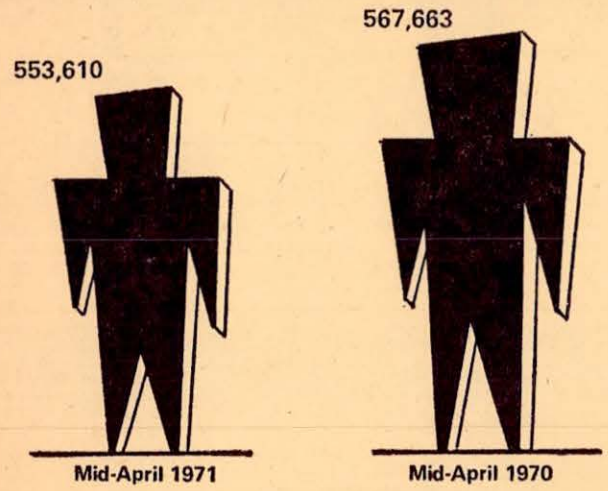
	May 1, 1971	May 1, 1970	Change
Car ownership	1,431,496	1,434,641	−3,145
Waiting repair	79,619	81,003	−1,384
Repair ratio	5.6%	5.6%	—

● *Canadian National.*—Ordered 500 70-ton insulated box cars, costing $14 million, from National Steel Car. Delivery will begin next December and be completed by the end of February 1972. The cars, to be equipped with movable bulkhead devices, will haul grocery products. Also CN ordered an additional 60 85-ft container flat cars—capable of carrying four containers at a time—from Hawker Siddeley Canada at a cost of $1.1 million (RA May 31, p. 69). Deliveries of this additional order are scheduled for January 1972

● *Southern Pacific.*—Ordered 300 freight cars from the Amcar Division of ACF at an approximate cost of $6 million. Included are 100 "Precision Design" 60-ft, 9-in.-long box cars equipped with ACF "Freight-Saver" center-of-car cushioning devices, 70-ton roller bearing trucks. 10-ft sliding doors and flooring to support 50,000-lb lift-truck loading. Delivery is scheduled for this month. A second lot of 100 60-ft, 9-in. "Precision Design" box cars will also have the cushioning devices and 50,000-lb flooring. Fifty of these cars will have 70-ton roller bearing trucks and 10-ft doors; the other 50 will have 100-ton roller bearing trucks and 16-ft double-sliding doors. Delivery is scheduled for the latter half of 1971.

RAILROAD EMPLOYMENT

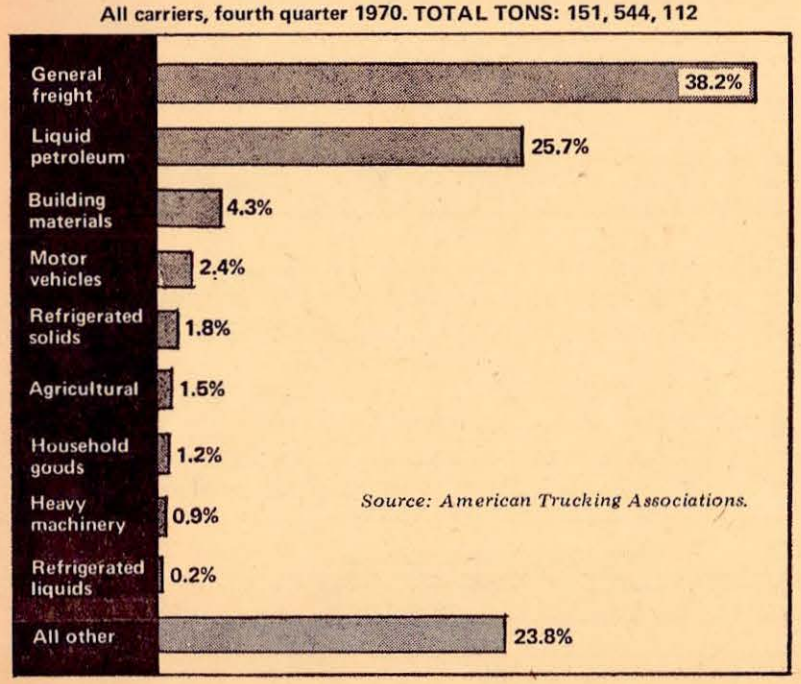
(CLASS I LINE-HAUL RAILROADS)



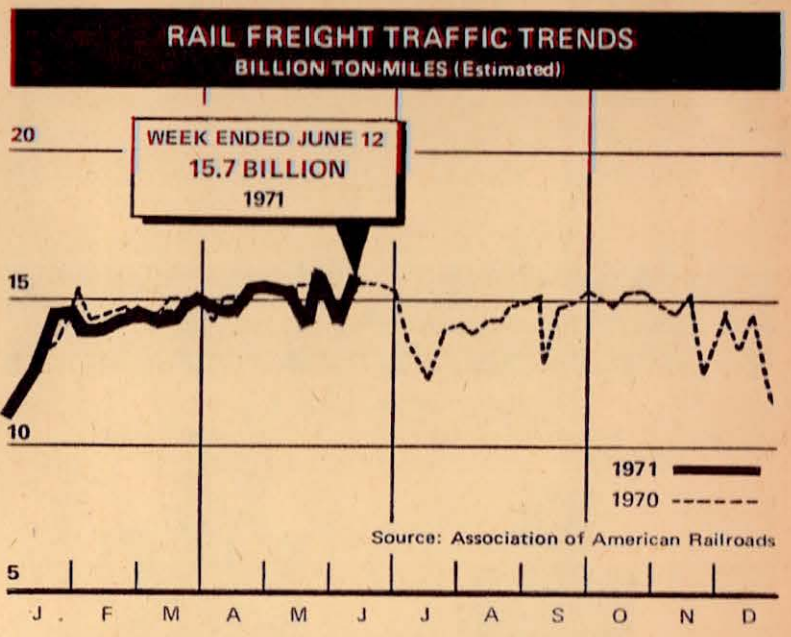
Source: Bureau of Accounts, ICC.

INTERCITY TRUCK TONNAGE BY COMMODITIES

All carriers, fourth quarter 1970. TOTAL TONS: 151, 544, 112

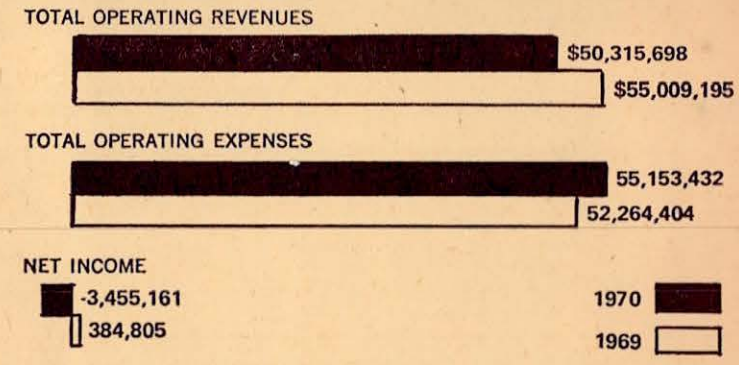


Source: American Trucking Associations.



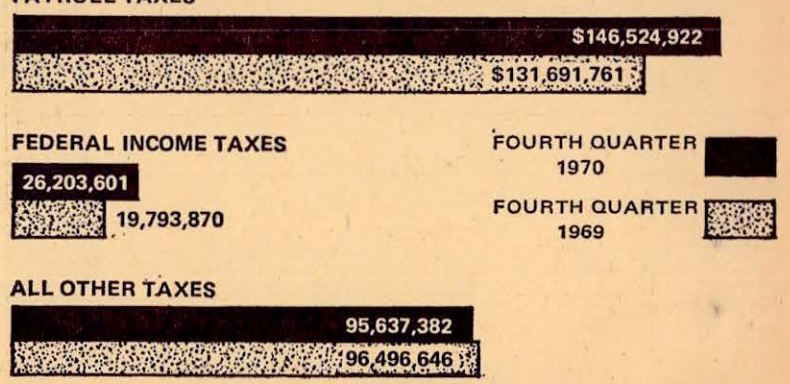
FREIGHT FORWARDERS—SELECTED STATISTICS

(FOURTH QUARTER 1970 AND 1969)



Source: Bureau of Accounts,ICC. Compiled from 67 quarterly reports of forwarders with annual gross revenues of $100,000 or more.

RAILROAD TAXES*



**U.S. Class I railroads; switching and terminal companies excluded.*
Source: Bureau of Accounts, ICC.

Viewpoint

Q. What is trucking's stake in railroads? A. Survival

What ICC Commissioner John W. Bush said at Hot Springs, Va., on June 11 was remarkable enough in itself:

"It is no secret that within the Department of Transportation and the Commission, key staff people are presently trying to come up with a figure of what it would cost to nationalize the Penn Central Railroad—if it should become a choice of doing that or having to stop the road's carrier operations."

What was even more remarkable, however, was the fact that Commissioner Bush made this speech not to railroad men, but to the Board of Governors of the Regular Common Carrier Conference, American Trucking Associations.

It was within the following context that Mr. Bush divulged what had been, in fact, a secret, though not a well guarded one:

"One of the greatest dangers we face is the danger of complacency and of accepting too easily today what was unthinkable yesterday.

"I am thinking specifically now of the intolerable specter of nationalization of our transportation industry. If it happened it would probably happen to some of the railroads first, but, as in all other nations, the other modes would soon be swept in, too . . . Already I can begin to see and feel too much of an attitude of complacency, or acceptance, or the attitude that, maybe 'it's just talk instead of a terribly real possibility.' "

It was then that Mr. Bush astounded his audience by describing the Penn Central nationalization studies.

Despite the scare-headlines it created, it was a far from pessimistic speech—for Mr. Bush saw hope for the transportation community arising out of the very fact that it is at last beginning to *act* like a community.

"I think Bill Bresnahan [of American Trucking Associations], Steve Ailes [Association of American Railroads] and John Creedy [Water Transport Association] and the management leaders of the motor carrier, railroad and water carrier companies are 'reading the tea leaves' more accurately than they were read in the past years . . . .

"I urge your leaders and the leaders of the other segments of the industry to redouble the efforts they are presently making to find *areas of agreement* as to where statutory changes can be considered in this session of Congress."

CONGRESS AS DOCTOR—OR CARETAKER?

There is heartening evidence that the kind of approach urged by Commissioner Bush is, in fact, now being pursued by leaders within the various modes.

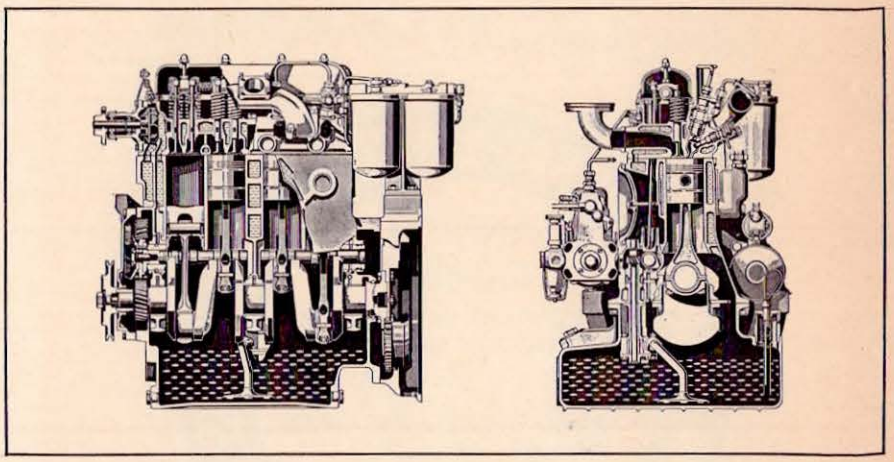
If they are able to present a united front to Congress in behalf not of sick railroads, not of ailing motor carriers, not of sinking water carriers, but in behalf of healthy *transportation*—if they can accomplish this, then there is a very good chance, as Mr. Bush suggested, that Congress will be willing to assume the role of doctor.

The alternative role of Congress will be that of caretaker—caretaker, that is, of those segments of the transportation industry that survive.

Mercedes-Benz OM 636

25,000 hours without an overhaul.

THAT'S quite a track record. Even for Mercedes-Benz. And every day, OM 636's in controlled temperature service keep adding to that record. In fact, one has even purred past the 30,000-hour mark before being overhauled. That's roughly equivalent to an automobile racking up over *1,200,000 miles.* And it's one reason why you'll find a Mercedes-Benz OM 636 diesel engine in more than *eighty-five percent* of the world's diesel powered controlled-temperature containers.



1°F accuracy from —20°F to 70°F

But there's another equally important reason why the OM 636 has become the standard of the controlled temperature container industry: *constant RPM at any control setting throughout the speed range.*

Ship an OM 636 powered container across the country, or around the world. And the cargo temperature won't vary more than 1° from the instrument control setting. Whether it's set for —20°F or 70°F. Or anything in between. Regardless of how tropic, or how frigid the weather is outside.

Some other comforting facts about the OM 636

The OM 636 reflects Mercedes-Benz diesel engine "know how" that stretches back to 1907 (including history's first diesel-powered truck). Experience that led the designers of the OM 636 to specify *forged aluminum* pistons for longer service. A *one-piece* cylinder crankcase casting to virtually eliminate leaks and provide better cooling. *Glow stud plugs* for easier starting in Arctic temperatures. And a water-circulating pump with *sealed-in lubrication* to do away with hand lubrication.

But all the engineering in the world can't *build* a trouble-free engine. That's up to the craftsmen in the plant. So every engine is precisely machined, balanced and assembled in a factory where castings are X-rayed to spot invisible flaws. Tolerances are checked on special marble tables with instruments so sensitive a human hair sends the recording device off the scale. And every OM 636 is subjected to a grueling bench test that lasts for almost an hour.

8-Page Brochure

For more information, including technical data and installation dimensions for the Mercedes-Benz OM 636 diesel, send for a free 8-page brochure. Just write to Daimler-Benz of North America, Inc., Industrial Division, 126-56 Northern Boulevard, Flushing, N.Y. 11368. Or call at (212) 899-4000.

MERCEDES-BENZ

A Price-Quality standard second to none.

These are some of the controlled temperature equipment manufacturers using the OM 636 diesel in their fine products: Thermo King of Minneapolis, Minn. Carrier Air Conditioning Co. of Syracuse, N.Y. and Montebello, Calif. York Division of Borg-Warner Corporation, York, Pa.

Circle 22 on coupon page 35

(Continued from page 43)

heads the railroad equipment and electronic data processing equipment leasing programs in the two firms' National Division, New York.

Carl H. Johnson has been named director of signal products operation, Energy Systems Division, **Olin Corp.,** New York.

Albert R. Snider has been appointed group executive, Transportation Products Group, **Whittaker Corp.,** Los Angeles.

Donald J. Hogan & Co., Chicago, has been appointed special sales representative, Railroad Applications, **Krautkramer Ultrasonics, Inc.,** in the North-Central area.

William C. Cunningham, district sales manager, has been elected vice president-marketing, **Alco Spring Industries, Inc.,** Chicago Heights, Ill.

Carl E. Tack, senior vice president, **American Steel Foundries,** Chicago retired June 1. Mr. Tack has 135 United States patents and 216 in 21 other nations.

Thomas J. McPhillips has been elected executive vice president of **C.I.T. Corp.** and **C.I.T. Leasing Corp.,** New York.

Christopher C. Reynolds has been appointed manager, customer service engineering department, **ACI Systems Corp.,** Chicago. Mr. Reynolds will direct the installation and maintenance of automatic car identification scanning equipment and terminal control systems.

Mitchell R. Gillenwater has been appointed vice president and general manager, **Lithcote Co.,** Chicago. Before joining Lithcote, Mr. Gillenwater was manager, Transportation Equipment & Maintenance Operations, Allied Chemical Co.

Roger D. Wynkoop has been named a sales representative, New York district, **Shippers Car Line division, ACF Industries.**

R.T. Mulroney has been appointed manager—customer service, **Dresser Transportation Equipment Division, Dresser Industries, Inc.,** at Depew, N.Y., succeeding **J. R. Groff,** who retired after 43 years of service. **R.G. Luebke** will assist Mr. Mulroney

Juan Colao has joined the Whiting International Division, **Whiting Corp.** as regional sales manager, Harvey, Ill. Mr. Colao was formerly with Monsanto Chemical Co.

Raymond E. Erjavec has been named product engineer, Railroad Sales Department, **CF&I Steel Corp.,** Pueblo, Colo.

INDUSTRIAL TRAFFIC

Jack C. Hill, assistant traffic manager, has been promoted to traffic manager, Western Plant, **Hershey Foods Corp.,** Chocolate and Confectionery Division, Oakdale, Calif.

Robert R. Blatchley has been promoted to North Central District Manager, Transportation Division, **Kemlite Corp.,** Joliet, Ill.

William C. Harding has been named to the newly created position of manager of transportation research and planning at **Cargill, Inc.,** Minneapolis. He will continue to have overall supervision of transportation information services, computer planning, and rail hopper car coordination **Ronald E. Cosey** has been named traffic manager for Cargill's chemical products division. **Michael J. Smith,** traffic manager, salt department, transferred to the transportation department as traffic manager—computer liaison.

OBITUARY

Samuel J. Cooley, 78, retired vice president—real estate and industrial development, **Milwaukee,** died June 1 at Pontiac, Ill.

Robert H. Devine, assistant vice president, **Koppers Company,** Pittsburgh, died May 31.

J. Sargent Reynolds, 34, vice president for corporate affairs, **Reynolds Metals Co.,** Richmond, Va., and lieutenant governor of the State of Virginia, died June 13 in New York.

William J. Whalen, 78, retired vice president—operation, **Milwaukee,** died May 27 in Sacramento, Calif.

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NEWS

Noise abatement for retarder yards?

Car retarders and violins have one thing in common—both produce sound when "played." When a freight car rolls through a retarder, the wheel rim acts much like a violin bow stroking the retarder shoe "string." This wheel-retarder "playing" also produces sound which people can hear—2,000 to 4,000 cycles per second—and the power of this sound can be deafening (compared with violin playing or a lot of other things).

Measurements taken at retarder yards indicate that wheel screech (or retarder squeal) lies between 110 and 120 decibels. Acoustics experts have said that the threshold of pain in the human ear is 120 db.

Some municipalities have passed noise-abatement ordinances which specify sound levels. With today's emphasis on environmental control, noise-abatement ordinances may well restrict locations—and affect construction details—of retarder yards.

Burlington Northern, in writing specifications for its Northtown Yard at Minneapolis, is including sound-level requirements on noise control.

Tests at A. E. Perlman Yard, Selkirk, N.Y., on Penn Central, revealed that wheel screech at 200 feet from the retarder peaked at 113 decibels at above 2,200 cycles per second. Estimated maximum noise level 5,000 feet from the retarder was 70 decibels; at 10,000 feet from the retarder it was 45 decibels. (The latter figure is only 7 decibels above a typical residential noise ordinance limit.)

Several methods of reducing noise level have been suggested. Use of the ductile iron in place of steel for retarder-shoe material may produce lower noise levels. Tests at Perlman Yard "have established the fact that wheel screech, rarely, if ever, occurs in a ductile-iron-equipped retarder at car speeds under 6 mph. . . . At higher car speeds the principal effect of ductile iron shoes appears to be a significant reduction in the number of cars which produce wheel screech as compared to the use of steel shoes," reports Hugh C. Kendall, senior consultant, technical marketing, General Railway Signal Co.

Burlington installed ductile iron and graphite inserts lengthwise in the ball of the retarding rails of inert retarders at Cicero, Ill., Yard in 1967. Considerable noise reduction was accomplished. A spokesman says that the ductile iron and graphite inserts provide better retarding effort than the previously-used all-steel rail.

Offsetting the improved retarding effort—as much as 12%-to-15% over use of steel shoes—ductile-iron shoes appear to wear four times as fast as steel shoes.

As a general observation, retarders under automatic control produce wheel screech less frequently than retarders under manual control, Kendall says. The reason is that with automatic control the retarder is opened and closed more frequently and build-up time for screech is not obtained. With manual control, the retarder is closed for longer periods.

Experiments with lubricants on the retarder shoes indicates it might be possible to retain as much as 75% of the original retarding effort; however, more work needs to be accomplished in this area before the full impact of controlled lubricants can be evaluated.

"It should be borne in mind that propagation of wheel screech can be attenuated by using acoustic barriers running parallel to the retarder up to about 10 feet high. Wheel screech is propagated horizontally and at right angles to the direction of movement of the car. Various forms of masonry walls could be expected to produce a shielding effect of 20 decibels or more," Kendall says. However, little has been done thus far in evaluating such barriers.

Whitman speaks out on railroads, labor

Reginald N. Whitman left Washington just about a year ago. Since then, the former Federal Railroad Administrator has gone his quiet way, running the Katy as chairman and president and staying out of the limelight. Recently, however, he went before the Trans-Missouri-Kansas Shippers Advisory Board with his first speech since departing FRA. Among his observations:

—Regardless of the various obligations which a railroad itself may have, "no one has an obligation to use a railroad unless it can produce better transportation than its competitors at competitive cost."

—"When I worked in Washington, where I tried my best to take an objective view of [management/labor] problems, I could not help but feel that rail management and the unions were arguing about the wrong thing. . . . I think both management and the heads of railroad unions must take a new look at what has happened to railroad employment . . . and then re-evaluate their problems. . . . It seems very clear to me that railroad management and railroad unions must get together to see what can be done about providing better service without drastic increases in tariffs so as to attract higher volume. I am sure that increased employment must necessarily follow."

—Management, from an operating standpoint, "must make adjustments at major terminals to effect the most efficient interchange possible for the benefit of the customer, without regard to the competitive factor."

Buffalo moves toward rail transit system

Buffalo, N.Y., might be the next U.S. city to go operational with rail transit. Action taken by the legislature at Albany in its closing hours gave the Niagara Frontier Transit Authority the go-ahead, and $86 million to start building a $12.5-mile duo-rail system. Senate approval was unanimous, 55-0. Earlier the 150-man House voted with only one negative voice in favor of the legislation. Included is authority to consolidate seven regional bus companies into a single operation with the projected rail line.

The line would begin at the abandoned Buffalo terminal of the former Delaware, Lackawanna & Western and extend northeasterly to Amherst, with a station at the South Campus of the State University, and three stations at the big expanding North Campus. Full service is planned by January 1977.

a step ahead with advanced technology

THE COMMUTER

The sophistication of transportation technology has made modern America the most highly mobile society in history. Yet, in an age of practically unlimited mobility, the industry's most complex problem is simply getting people to and from work. Exploding populations transform high-speed arteries into bumper-to-bumper traffic and clog vital new ribbons of concrete as soon as construction crews leave the scene.

Thus, the sign of our times is a commuter who daily faces tedium and frustration. His plight has become a focal point of national concern and a challenge to which General Electric is bringing its advanced technology.

Recognizing not only the efficiency and economy of rail transportation, but also its social and ecological benefits, GE is taking significant steps leading to a renaissance of comfortable and convenient commuter service. GE has become the country's first totally integrated manufacturer of transit and commuter cars, thereby blending complex systems ability with electrical and motive power innovation.

With parallel experience in the locomotive business, General Electric has also designed a diesel-electric for high-speed commuter operations. Twenty-three have been placed in suburban service on the Erie-Lackawanna. Here, they are demonstrating the bold technology that provides commuter railroads with new reliability and the commuter with new convenience, safety, and environmental freshness.

Signs of hope are emerging with implementation of GE's new rail transportation technology. Aimed at the heart of congestion, this technology moves home pleasantly closer to office and keeps the suburbanite a step ahead of further frustration.

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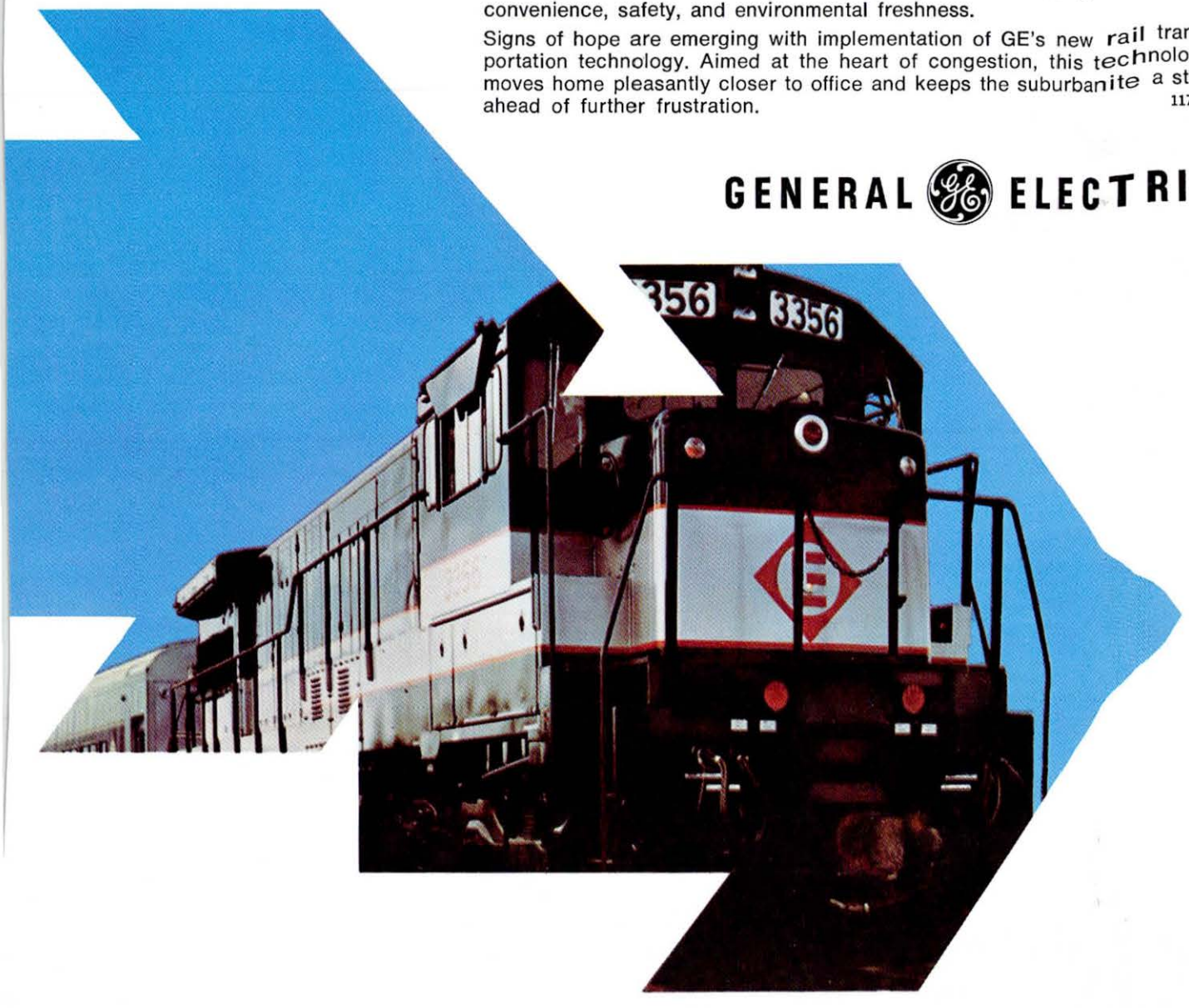

The day the railroads didn't run.

Again.

On Monday, May 17, nobody had to wait at a rail crossing for a train to pass. Nobody was jostled on a station platform.

There wasn't even a train whistle to be heard.

By Tuesday, May 18, the nation waited for the ominous silence to spread. News media reported that the whistles of the country's largest steel mill would become silent next, perhaps by midnight, and day by day the silence would spread across the land. By Friday, no one would be building automobiles anymore. By Monday, the silence would have doubled the number of people without work.

Like a silent plague on healthy people, activities would stop, and within two weeks the economy of the greatest nation in the world would be at a standstill.

It happened when the railroads stopped running.

The President said: "A nationwide stoppage of rail service would cause great hardship to all Americans and strike a serious blow at the nation's economy. It is essential that our railroads continue to operate."

In immediate response to the crisis, Congress passed the necessary legislation for workers to return to their jobs.

But everything is not all right again.

Congress only passed a law moving Tuesday, May 19 to October 1.

And there may be a far greater "Mayday" coming, that cannot be settled at a bargaining table, arbitrated or forbidden by law.

It is not enough to legislate to symptoms. Legislating to the cause is the only hope.

The causes of today's railroad crisis are clear. It is the inability of the railroads to economically survive, restricted to 1890 business practices by 1890 laws enforced in 1971.

They are restricted from innovative new experiments.

They are required to operate rail lines no longer needed, and subsidize services nobody will buy.

Perhaps the greatest tragedy is that although the railroads are essential to our modern economy, they are not permitted to react in either sufficient time or measure to meet quickly changing needs, within the realities of today's economy.

What is needed is new and just legislation, relevant to today's situation, and equitable to all modes of transportation.

Failure to act may mark the approach of another, more terrible Tuesday.

But next time there may be no Wednesday.

This message on behalf of Americans and their railroads appears nationally in leading newspapers, as a public service of **Pullman-Standard,** America's leading builder of rail cars. *Reprints* are available by writing Pullman-Standard Division, Pullman Incorporated, 200 South Michigan Avenue, Chicago, Illinois 60604.